

Технические характеристики

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Ижевск (3412)26-03-58	Набережные Челны (8552)20-53-41	Севастополь (8692)22-31-93	Череповец (8202)49-02-64
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Россия (495)268-04-70	Киргизия (996)312-96-26-47	Казахстан (7172)727-132	

01 ENGINEER'S PRECISION SQUARES

SS-A

ESP Escaudras de precisión para ingeniero FR Équerres de précision DE Präzisions-Haarwinkel

Internal & External Squareness as per BS 939 Grade B

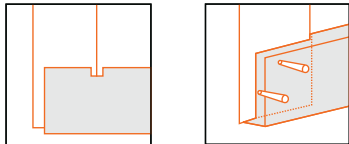
An excellent range of precision steel squares that are second to none

These are useful for setting up & checking jobs where extreme accuracy is required

Hardened spring steel blades are permanently fixed to the stock by means of tapered self locking rivets which ensure complete rigidity

Both the blade and stock are precisely ground to ensure straightness and parallelism. Working edges of the blades are lapped which further enhances accuracy

A groove on the inner corner of the stock aids in the clearance of burr or dirt



The stock is grooved at inner corner for clearance for burr or dirt so that there is no interference with measuring accuracies

Use of tapered self locking rivets ensures perfect rigidity



Engineer's Precision Square Set
A selection of most popular sizes available inconvenient and easy to store pack

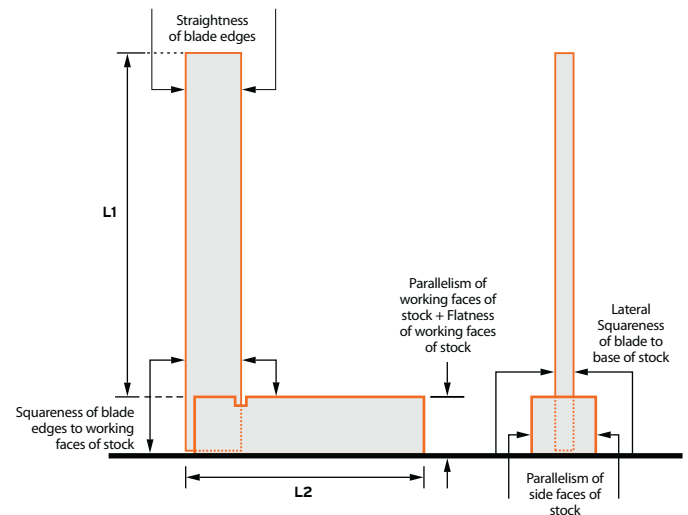
SS/A/2-3-4-6/ST

Ordering Information

Cat. Nr.	Ordering Nr.	Blade Length L1 (from inner edge of stock to end of blade)		Stock Length L2 (from edge of stock to outer edge of blade)	
		Inch	mm	Inch	mm
SS/A/2	01000	2	50	2	50
SS/A/3	01001	3	75	2-3/8	60
u SS/A/4	01002	4	100	3	75
u SS/A/6	01003	6	150	4	100
H SS/A/8	01004	8	200	5	125
SS/A/9	01005	9	225	6-5/16	160
H SS/A/10	01006	10	250	6-1/2	165
SS/A/12	01007	12	300	8-9/32	210

Sets		
Cat. Nr.	Ordering Nr.	Set Constituents
SS/A/2-3-4-6/ST	01011	One each of 2" (50 mm), 3" (75 mm), 4" (100 mm) & 6" (150 mm) Squares
u SS/A/2-4-6/ST	01012	One each of 2" (50 mm), 4" (100 mm) & 6" (150 mm) Squares

u BESTSELLER H MADE TO ORDER



Technical Information

Cat. Nr.	Straightness of blade edges		Flatness of working faces of stock		Parallelism of working faces of stock		Parallelism of side faces of stock		Squareness of blade edges to working faces of stock		Lateral squareness of blade to base of stock	
	Inch	microns	Inch	microns	Inch	microns	Inch	microns	Inch	microns	Inch	microns
SS/A/2	0.00031	8	0.00016	4	0.00020	5	0.00098	25	0.00063	16	0.00492	125
SS/A/3	0.00031	8	0.00016	4	0.00020	5	0.00098	25	0.00063	16	0.00492	125
SS/A/4	0.00031	8	0.00023	6	0.00020	5	0.00098	25	0.00063	16	0.00984	250
SS/A/6	0.00031	8	0.00023	6	0.00020	5	0.00196	50	0.00063	16	0.00984	250
SS/A/8	0.00031	8	0.00031	8	0.00031	8	0.00196	50	0.00078	20	0.01476	375
SS/A/9	0.00047	12	0.00031	8	0.00031	8	0.00196	50	0.00094	24	0.01476	375
SS/A/10	0.00047	12	0.00031	8	0.00031	8	0.00196	50	0.00094	24	0.01476	375
SS/A/12	0.00047	12	0.00031	8	0.00031	8	0.00196	50	0.00094	24	0.01476	375

02 STRAIGHT EDGE SQUARES

SS-SE

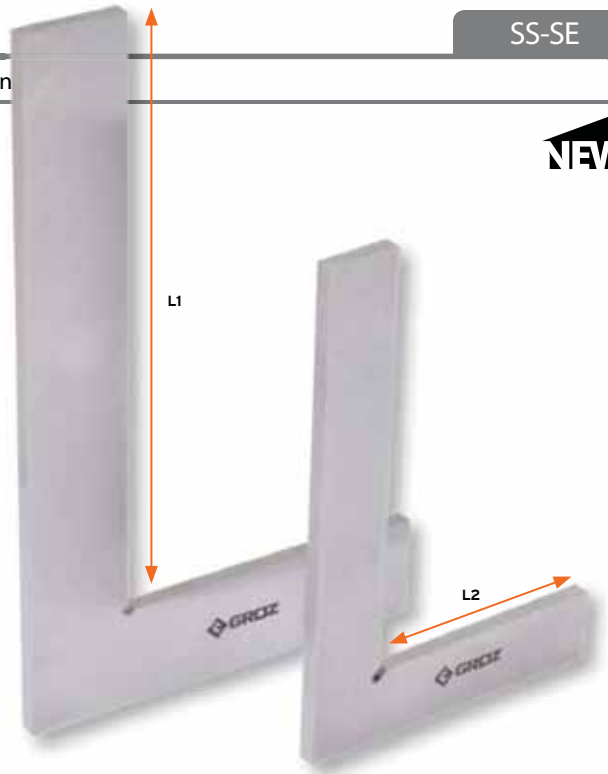
ESP Escaudras de precisión FR Équerres de précision DE Präzisions-Haarwin

An excellent range of workshop squares with straight edge

Made from selected tool steel, these are fully hardened and ground. Squares have accurate right angles on the inside and outside. Both the blade and stock are made from a single piece of steel which ensures straightness and parallelism

Groove on the inner corner of the stock helps in removing burrs and dirt

This range of squares comes in handy for setting up, checking machinery & in everyday workshop use

Ordering Information

Cat. Nr.	Ordering Nr.	Blade Length (L1) (from inner edge of stock to end of blade)		Stock Length (L2) (from edge of stock to inner edge of blade)		Squareness of blade edges to working faces of stock	
		Inch	mm	Inch	mm	Inch	microns
u SS/SE/3	01130	3-1/8	80	2	50	0.0011	30
u SS/SE/5	01131	5	125	3	75	0.0013	33
u SS/SE/6	01132	6-3/4	170	4	100	0.0015	37
SS/SE/8	01133	8-1/2	215	5-1/8	130	0.0016	42
SS/SE/10	01134	10-1/2	265	6-3/8	162	0.0018	47

u BESTSELLER

03 MACHINIST'S SQUARES

No. 011

ESP Escaudras de operario FR Équerres de mécanicien DE Maschinist Haarwinkel

An excellent range of general purpose steel squares

Whilst ideal for everyday workshop use, these are also suitable for woodworking applications

Made from selected steel with hardened blade, these squares have accurate right angles both on the inside and outside

Both the blade and stock are accurately ground which ensures straightness and parallelism

This range of squares comes in handy for setting up and checking machinery, checking Carpenter's squares or using as a try-square when marking joints or testing faces & edges

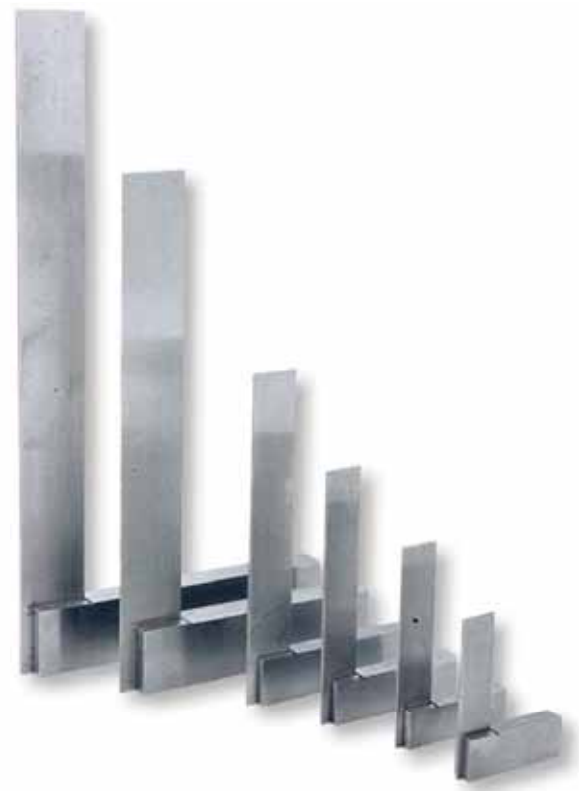
Ordering information

Cat. Nr.	Ordering Nr.	Blade Length (from inner edge of stock to end of blade)		Stock Length (from edge of stock to outer edge of blade)		Squareness of blade edges to working faces of stock	
		Inch	mm	Inch	mm	Inch	mm
SS/2	01100	2	50	2	50	0.0019	48
SS/3	01101	3	75	2-3/8	60	0.0019	48
u SS/4	01102	4	100	3	75	0.0019	48
u SS/6	01103	6	150	4	100	0.0028	72
SS/8	01104	8	200	5	125	0.0028	72
SS/9	01105	9	225	6-9/32	160	0.0028	72
SS/10	01106	10	250	6-1/2	165	0.0028	72
SS/12	01107	12	300	8-1/4	210	0.0038	96
F SS/18	01108	18	450	10	255	0.0057	144
F SS/24	01109	23-1/2	600	13	330	0.0057	144

Sets

Cat. Nr.	Ordering Nr.	Set Constituents
u SS/2-3-4-6/ST	01110	One each of 2" (50 mm), 3" (75 mm), 4" (100 mm) & 6" (150 mm) Squares
SS/4-6-9-12/ST	01111	One each of 4" (100 mm), 6" (150 mm), 9" (225 mm) & 12" (300 mm) Squares

u BESTSELLER F MADE TO ORDER



04 STRAIGHT & KNIFE EDGES

SE

KE

ESP Reglas de precisión FR Regles de précision DE Präzisions-Lineale



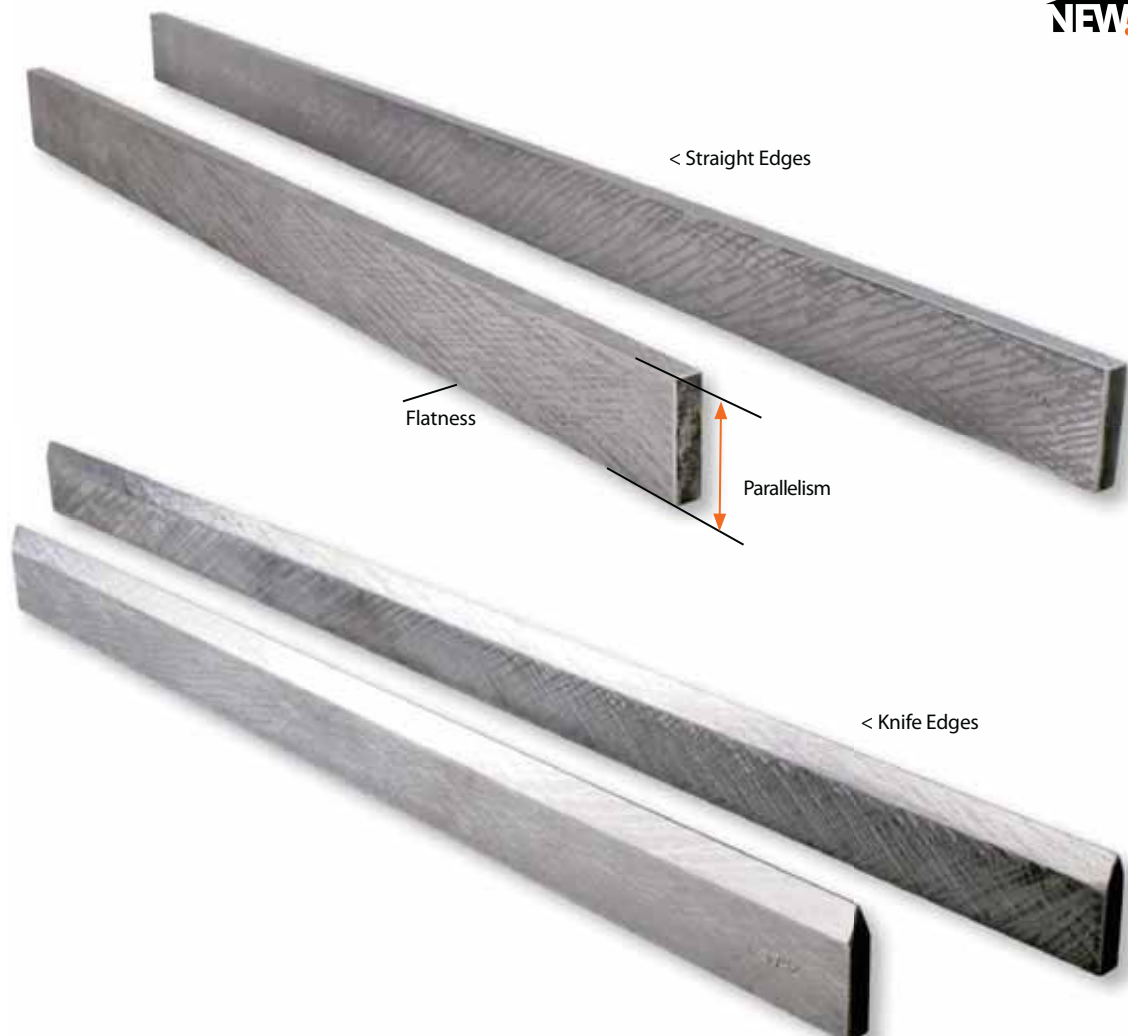
Manufactured from high quality spring steel, Straight & Knife Edges are fully ground and hand scraped for a perfectly flat surface. Hand scraping removes all the high points left from grinding making these an extremely accurate tool

The thickness and design permit these to retain shape & accuracy yet convenient to carry around

Used for drawing & scribing straight lines, checking straight lines, checking surfaces for straightness, setting up machines such as planers etc. these are available in two types:

Straight Edges - These have flat edges on both sides

Knife Edges - These are flat on one side and have a bevel on the other that provides an excellent visual line contact with the work piece



Ordering Information

Cat.Nr.	Ordering Nr.	Cat.Nr.	Ordering Nr.	Length		Width		Thickness	
				Inch	mm	Inch	mm	Inch	mm
Straight Edges		Knife Edges							
u SE/12	02500	KE/12	02550	12	300	1-13/32	36.0	5/16	8
SE/18	02501	KE/18	02551	18	450	1-13/32	36.0	5/16	8
u SE/24	02502	KE/24	02552	24	600	1-13/32	36.0	5/16	8
SE/36	02503	KE/36	02553	36	900	2-13/32	61.0	3/8	10
u SE/48	02504	KE/48	02554	48	1200	2-13/32	61.0	3/8	10
SE/60	02505	KE/60	02555	60	1500	3-5/32	80.0	3/8	10
u SE/72	02506	KE/72	02556	72	1800	3-5/32	80.0	3/8	10
SE/96	02507	KE/96	02557	96	2400	3-5/32	80.0	19/32	15
SE/120	02508	KE/120	02558	120	3000	3-1/4	83.0	19/32	15

u BESTSELLER

Technical Information

Cat.Nr.		Flatness of Edges		Parallelism of Faces	
Straight Edges	Knife Edges	Inch	Microns	Inch	Microns
SE/12	KE/12	0.00047	12	0.00094	24
SE/18	KE/18	0.00047	12	0.00094	24
SE/24	KE/24	0.00067	17	0.0013	33
SE/36	KE/36	0.00083	21	0.0016	40
SE/48	KE/48	0.0011	28	0.002	50
SE/60	KE/60	0.0011	28	0.002	50
SE/72	KE/72	0.0015	38	0.0029	74
SE/96	KE/96	0.0018	45	0.0036	91
SE/120	KE/120	0.0021	54	0.0043	110



Straight Edge being used to check flatness of an engine block

05 JENNY CALIPER – HERMAPHRODITE CALIPER

JC

ESP Compas de centrado FR "Jenny" Compas DE "Jenny" Spitzzirkel

Manufactured from selected steel, the legs are exceptionally rugged and well finished. The leg that holds the adjustable point is offset. The locating lug is incorporated in the straight leg

These are very useful in layout work for locating and testing centres, laying off distances from an edge etc. Working faces hardened to 58 HRC



A specific advantage of the Jenny Caliper is that it allows easy marking of arcs along the edge of workpiece

Ordering Information

Cat. Nr.	Ordering Nr.	Size	
		Inch	mm
JC/6	01540	6	150



06 WING COMPASS

WC

ESP Compas FR Compas de Menuisier 1/4 circle DE Spitzzirkel

These rugged industrial grade compasses are manufactured from heavy gauge steel with an attractive black power coated finish. The tip is accurately ground. Heavy duty hinge and knurled nut help in convenient movement

Used for precisely scribing arcs and circles on projects and drawings

NEW!



Ordering Information

Cat. Nr.	Ordering Nr.	Size		Scribing Capacity	
		Inch	mm	Inch	mm
WC/6	01550	6	150	8	200
u WC/8	01551	8	200	10-1/2	265
WC/16	01554	16	400	22	550

u **BESTSELLER**

07 SPRING CALIPERS & DIVIDERS

No. 014

ESP Calibradores & divisores muelle FR Compas et diviseurs Á ressort DE Feder-Spitzzirkel und Spitzzirkel

Calipers are one of the oldest type of comparison measuring tools. These are designed for taking comparative measurements and transferring the dimensions to a micrometer, precision rule etc.

Dividers are used for marking out circles on steel or transferring measurement from master templates

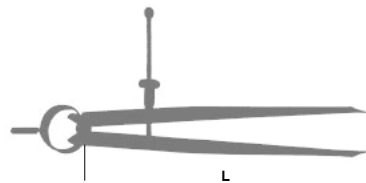
Manufactured from selected steel, calipers and dividers have a spring joint for precision settings. The legs pivot on a roller and are tensioned by bow spring. The fulcrum stud has a large bearing surface that prevents side deflection of legs

Adjustment is made by opening and closing of the legs by means of an adjusting nut

Divider points are hardened 50-55 HRC for increased wear resistance



Quick Nut
"An Alternative to the solid adjusting nut, a split quick adjusting nut is also available which helps in making quick & positive adjustments. The threads of the nut firmly engage the screw at the slightest pressure of the leg. When the pressure is withdrawn, the nut releases itself sliding freely over the screw. This feature helps save time in opening and closing when a variety of measurements have to be taken consecutively



Ordering Information

Cat. Nr.	Ordering Nr.	Cat. Nr.	Ordering Nr.	Size (L)	
				Inch	mm
Solid Nut		Quick Nut			
Inside Calipers					
ID/3	01400	ID/Q/3	01430	3	75
u ID/4	01401	ID/Q/4	01431	4	100
u ID/6	01402	ID/Q/6	01432	6	150
ID/8	01403	ID/Q/8	01433	8	200
ID/10	01404	ID/Q/10	01434	10	250
ID/12	01405	ID/Q/12	01435	12	300
Outside Calipers					
OD/3	01410	OD/Q/3	01440	3	75
u OD/4	01411	OD/Q/4	01441	4	100
u OD/6	01412	OD/Q/6	01442	6	150
OD/8	01413	OD/Q/8	01443	8	200
OD/10	01414	OD/Q/10	01444	10	250
OD/12	01415	OD/Q/12	01445	12	300
Spring Dividers					
DD/3	01420	DD/Q/3	01450	3	75
u DD/4	01421	DD/Q/4	01451	4	100
u DD/6	01422	DD/Q/6	01452	6	150
DD/8	01423	DD/Q/8	01453	8	200
DD/10	01424	DD/Q/10	01454	10	250
DD/12	01425	DD/Q/12	01455	12	300

u BESTSELLER



Inside Caliper in use to measure the internal diameter of a cylinder



Outside Caliper being used to inspect the external diameter of a machined component

08 SPRING CALIPERS & DIVIDERS – PREMIUM

No. 014P

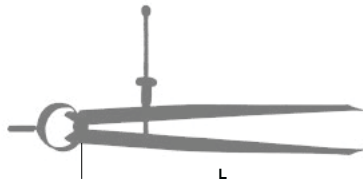
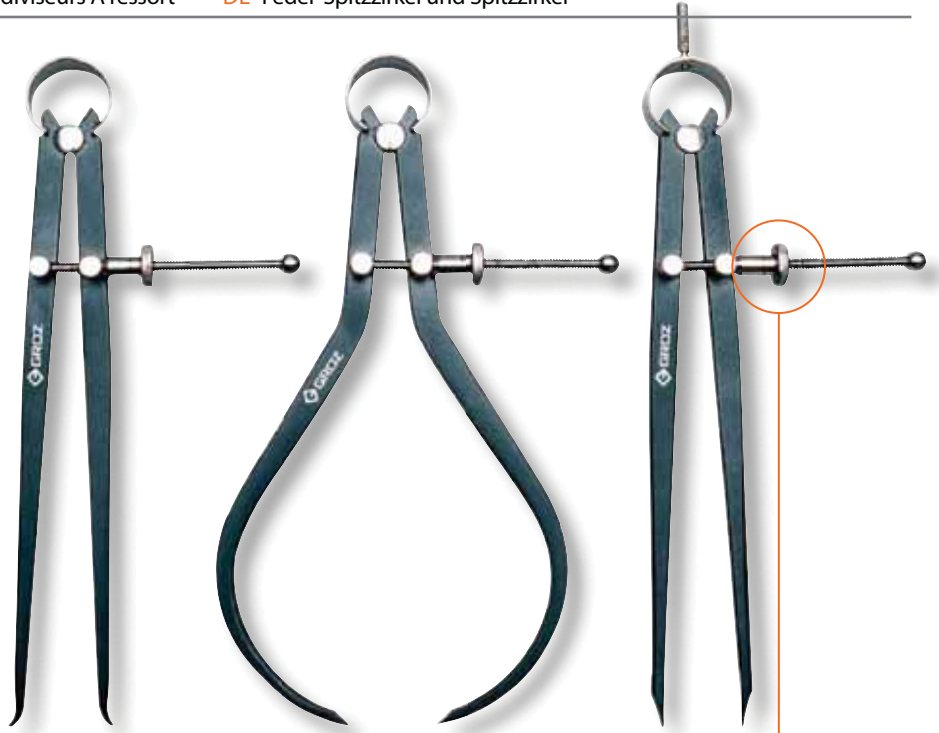
ESP Calibradores & divisores muelle FR Compas et diviseurs Á ressort DE Feder-Spitzzirkel und Spitzzirkel

This range of Calipers and Dividers are the finest tools of their type

Designed for reliable, accurate layout and measurement jobs, these are of immense use to toolmakers and all mechanics who require finer adjustment and better balance

Precision made to rigid standards throughout. Manufactured from high grade steel, the legs are machined to a smooth taper. Fulcrum stud has a large bearing surface preventing side deflection of legs. The finely machined solid nut runs smoothly to secure legs exactly to dimension

Divider points are hardened 50-55 HRC for increased wear resistance



Quick Nut
 "An Alternative to the solid adjusting nut, a split quick adjusting nut is also available which helps in making quick & positive adjustments. The threads of the nut firmly engage the screw at the slightest pressure of the leg - when the pressure is withdrawn, the nut releases itself sliding freely over the screw. This feature helps save time in opening and closing when a variety of measurements have to be taken consecutively

Ordering Information

Cat. Nr.	Ordering Nr.	Cat. Nr.	Ordering Nr.	Size (L)	
Solid Nut		Quick Nut		Inch	mm
Inside Calipers					
ID/SP/3	01460	ID/SP/Q/3	01560	3	75
ID/SP/4	01461	ID/SP/Q/4	01561	4	100
u ID/SP/6	01462	ID/SP/Q/6	01562	6	150
u ID/SP/8	01463	ID/SP/Q/8	01563	8	200
ID/SP/10	01464	ID/SP/Q/10	01564	10	250
ID/SP/12	01465	ID/SP/Q/12	01565	12	300
Outside Calipers					
OD/SP/3	01470	OD/SP/Q/3	01570	3	75
OD/SP/4	01471	OD/SP/Q/4	01571	4	100
u OD/SP/6	01472	OD/SP/Q/6	01572	6	150
u OD/SP/8	01473	OD/SP/Q/8	01573	8	200
OD/SP/10	01474	OD/SP/Q/10	01574	10	250
OD/SP/12	01475	OD/SP/Q/12	01575	12	300
Spring Dividers					
DD/SP/3	01480	DD/SP/Q/3	01580	3	75
DD/SP/4	01481	DD/SP/Q/4	01581	4	100
u DD/SP/6	01482	DD/SP/Q/6	01582	6	150
u DD/SP/8	01483	DD/SP/Q/8	01583	8	200
DD/SP/10	01484	DD/SP/Q/10	01584	10	250
DD/SP/12	01485	DD/SP/Q/12	01585	12	300
Sets					
Cat. Nr	Ordering Nr.	Set Constituents			
CD/SP/6/ST	01492	A set of 1 each: 6" (150 mm) Inside and Outside Calipers and Spring Divider			
u CD/SP/8/ST	01493	A set of 1 each: 8" (200 mm) Inside and Outside Calipers and Spring Divider			

u BESTSELLER

CA 11

CD/SP/6/ST
 A set of one each :
 6"(150mm) Inside &
 Outside Calipers &
 Springs Divider



09 DEGREE PROTRACTORS

DP-6

DP-R6

ESP Transportador de angulos FR Rapporteurs d` angles DE Winkelmesser

Manufactured from stainless steel, the Degree Protractor comes with a semi-circular or a rectangular head

The head has permanent deep etched graduations, 0 to 180° in opposite directions thus permitting reading an angle directly and also its supplement

The 6" (150 mm) blade has a graduation line on one end that permits accurate setting and reading of angles. The blade can be firmly set at the desired angle by means of a knurled nut

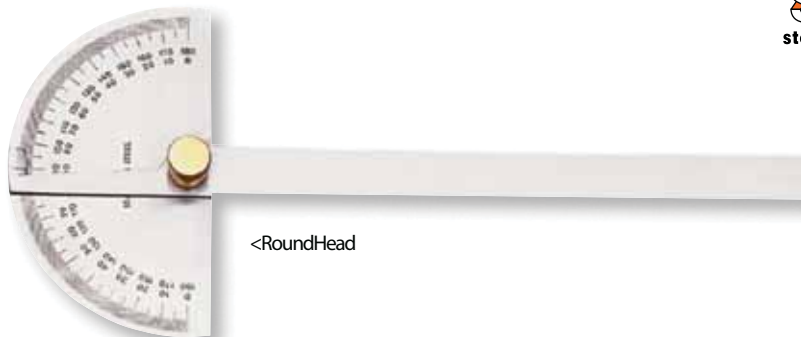
This is an ideal tool for machinists, draftsmen and mechanics for setting bevels, transferring angles, small squaring tasks, checking cutter clearances within limits etc.

The rectangular head provides additional convenience as it incorporates 4 working edges

Angular Tolerance: $\pm 0.5^\circ$

Ordering Information

Cat. Nr.	Ordering Nr.	Head
DP/6	01220	Round
DP/R/6	01224	Rectangular



<RoundHead



<RectangularHead



10 DEPTH GAUGE WITH PROTRACTOR

PDG-6

PDG-R6

ESP Calibrador de profundidad con transportador FR Rapporteur - Jauge DE Tiefe und Winkel-Lehre

A versatile tool, the Depth Gauge with Protractor allows for measurement of both angles and depths

Manufactured from stainless steel, the protractor head has permanent deep etched graduations, 0-180° in opposite directions, thus permitting reading an angle directly and also its supplement

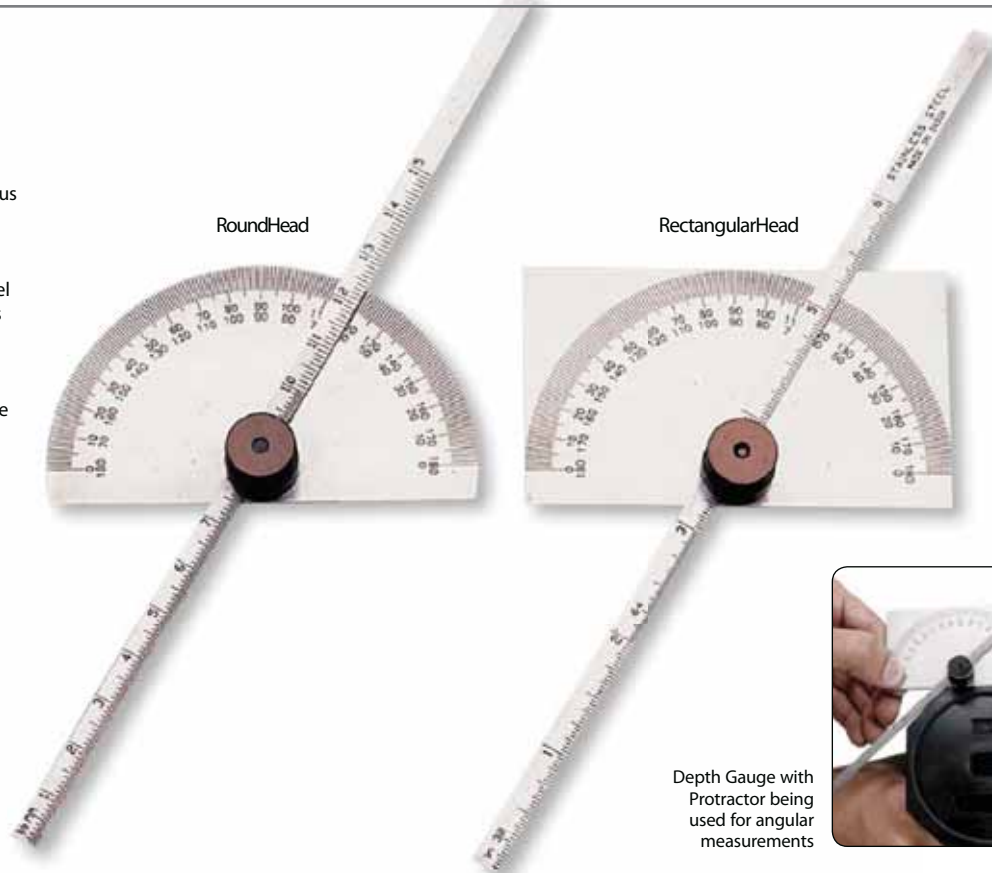
Depths are measured by a 6" (150 mm) steel rule. It is graduated in imperial dimensions on one side and metric on the other and can be set at any desired angle for use as a protractor and lengthwise when used as a depth gauge. A knurled thumbnut locks the rule in the desired position

The gauge has a flat surface on the back of the head permitting laying the tool flat upon the work. The rectangular head provides additional convenience as it incorporates 4 working edges

Angular Tolerance: $\pm 0.5^\circ$

Ordering Information

Cat. Nr.	Ordering Nr.	Head
PDG/6	01221	Round
PDG/R/6	01225	Rectangular



Depth Gauge with Protractor being used for angular measurements



11 MULTI-USE RULE AND GAUGE

RNG-4

ESP Múltiples uso Regla e Calibrador FR Multiple D'Usage Regle et J

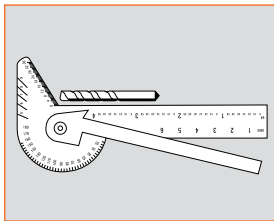
DE Mehrfache Gebrauch Regle und Lehre

A popular pocket-sized, 5 - in - 1 tool useful for a variety of applications

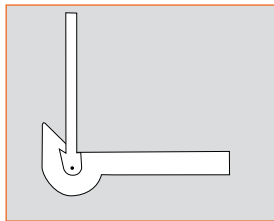
Can be used as:

- A Drill Point Gauge for checking 59° angle drill points
- A Protractor for measuring and laying out angles
- A Center Finder for locating centers on shafts and circles
- A Circle Divider for dividing circles into sectors, polygons and polygrams (up to nine equal parts)
- Tap and Drill Table shows popular tap sizes and corresponding drills sizes for American National threads

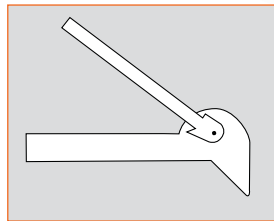
Manufactured from stainless steel, this multi use tool comes complete with a 4"(100 mm) rule with permanently etched graduations in 64ths and millimeters



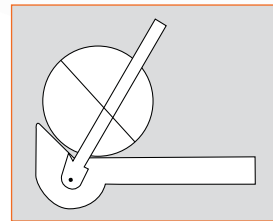
As a Drill Point Gauge



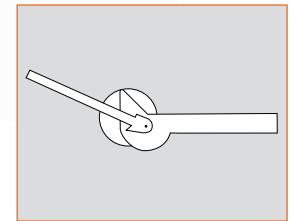
As a Square



As a Protractor



As a Center Finder



As a Circle Divider

Ordering Information

Cat. Nr.	Ordering Nr.
RNG/4	01240

12 DEPTH AND ANGLE GAUGES

DG

ESP Calibrador de profundidad con transportador FR Jauge de profondeur DE Tiefe und Winkel-Lehre

The ability to measure depths and angles is combined in this versatile tool

The head is made from selected steel and has an attractive black finish. It is graduated both left and right to 15°, 30°, 45° and the rule can be set to any of these angles

A 6" (150 mm) steel rule is fitted to the head and can be locked in final position for depth or angular measurements by a knurled nut



Ordering Information

Cat. Nr	Ordering Nr.	Rule Length	
		Inch	mm
u DG/6	01214	6	150
DG/8	01215	8	200
DG/9	01216	9	225
DG/12	01217	12	300

u BESTSELLER

13 BORE GAUGE (TAPER GAUGE)

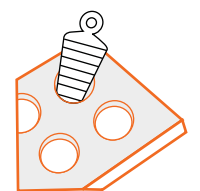
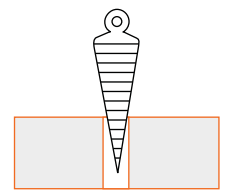
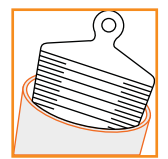
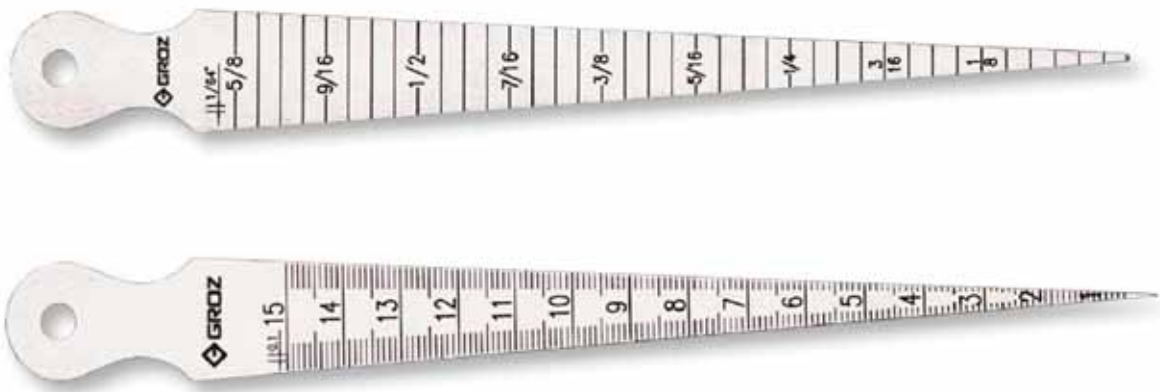
BG-115

ESP Calibrador de diametros FR Jauge à trou conques en acier DE Bohrungslehre

Manufactured from stainless steel with permanently engraved graduations

Accurate taper throughout the length of the gauge makes it a convenient tool for measuring diameters of small holes, slots etc.

With imperial graduations on one side & metric on the other, this is an ideal tool for die makers, machinists and on inspection floors



Ordering Information

Cat. Nr	Ordering Nr.	Range		Least Count	
		Inch	mm	Inch	mm
BG/1-15	01200	1/32-5/8	1-15	1/64	0.1

14 SHEET METAL & WIRE GAUGES

WG

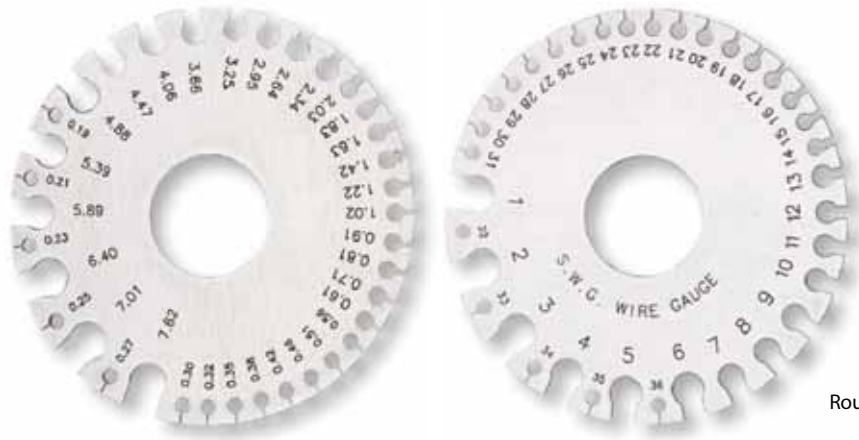
ESP Calibrador de alambres FR Jauge pour broche et feuille de métal DE Leitung Lehre

Made from heavy gauge hardened stainless steel, these are available in two versions — **Round & Rectangular**

These gauges are designed for measuring steel wire, hot & cold rolled steel sheet etc & check sizes from 0 to 36 gauge

The round gauges have metric dimensions marked on one side and gauge markings on the other. The rectangular gauges have both metric and gauge markings on the same side

Accuracy : within 100 microns



Round



Rectangular

Ordering Information

Cat. Nr	Ordering Nr.	Type
WG/R/6	01212	Rectangular
WG/RD/3	01213	Round

u BESTSELLER

15 SCREW CUTTING GAUGE

SCG

ESP Calibres para ángulo de cunas FR Calibres filet trapézoïdal DE Trapez-Gewindestahllehre

Manufactured from hardened and polished stainless steel, all gauge surfaces are accurately ground

It is most useful for checking tool angle while cutting threads in metal turning lathes. The angle on the thread cutting tool is checked on the V slots in the gauge

Relief at the end of each slot enables proper seating of the cutting tool in the slot thus ensuring correct angle



The gauge clearly indicates 55° for Whitworth and BSF Threads; 47-1/2° for BA Threads, 60° for Metric and American National Threads and 14-1/2° for Acme threads

Ordering Information

Cat. Nr.	Ordering Nr.
SCG/4714	01223

16 CENTER GAUGES

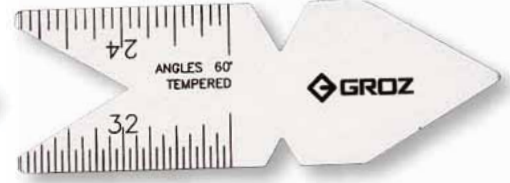
CG

ESP Plantilla de roscas FR Calibres de filetage DE Spitzgewindestahllehre

Manufactured from stainless steel, these small flat gauges have angles of 55° and 60°

Very useful for grinding and setting thread cutting tools, these may also be used for checking the pitch of threads through the permanently deep etched graduations in 14ths, 20ths, 24ths and 32nds of an inch

These gauges meet the American National or US 60°, Whitworth or English 55° specifications



Ordering Information

Cat. Nr.	Ordering Nr.	Type
CG/55	01210	55° Whitworth (English Standard)
CG/60	01211	60° American National (US Standard)

u BESTSELLER

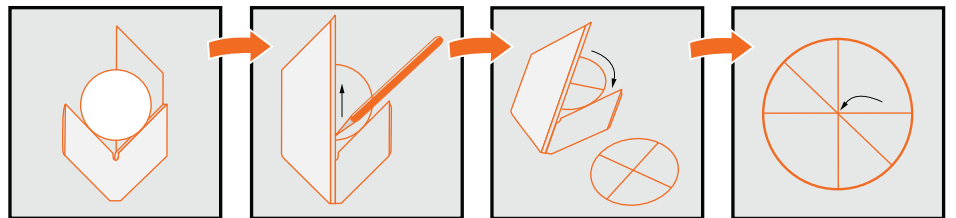
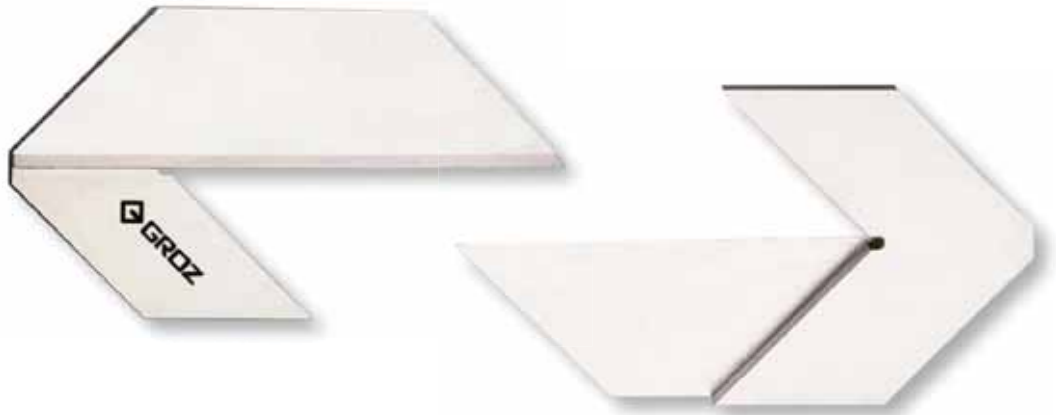
17 CENTER SQUARE

CS-1

CS-2

ESP Escuadra Centrador FR Équerres pour centrer DE Zentrierwinkel

An extremely useful tool for the machinist on the lathe or the tool maker at the bench for locating centers of round stocks /parts quickly and easily. The Knife edge is made from Spring Steel and is hardened 40 ± 5HRC and ground for extended life



Ordering Information

Cat. Nr	Ordering Nr.	Work Diameter	
		Inch	mm
CS/1	03521	1-1/2	38
CS/2	03522	3	75

To locate the center, position the Center Square Vee's onto the round stock near the end face of the stock

Scribe a line onto this end face, guided by the knife edge blade of the Center Square

Having done this, rotate the Center Square to two more positions, and scribe two additional lines

The perfect centering of the knife edges ensure that the three scribed lines meet at a common point of intersection. This is the center of the round stock/bar.

u BESTSELLER

18 MAGNETIC COMPASS

MBP-01

ESP Brújula magnética FR Compas magnétique DE Kompaß Magnetisch

NEW!

An extremely versatile tool that can be used as an **Angle Finder**, **Center Locator** & a **Levelling Gauge**

Tool is designed to give accurate reading of angles for full 360° via an extremely sensitive & balanced needle

The protractor body is encased in cast aluminium shell with legs made from cast iron. The Vee bases have inbuilt magnets that exert magnetic pull both within the Vee & across the bottom surface of the legs of the Vee. This allows the tool to attach instantly to any ferrous surface – round or flat for accurate measurement of angles

The Vee bases are precision ground and the center pin shows the middle point for locating centers on round objects. Can also be used for leveling work on workpieces

This tool has unlimited applications and can be used in:

- **Tool Rooms & Machine Shops:**
For determining angles on shapers, milling machines, grinders etc.
- For determining center of round stocks
- For drilling operations
- **Welding Shops**
- Construction & Maintenance sites
- Auto & Truck shops, especially for checking angles of die lines

Angle Accuracy: within $\pm 0.5^\circ$



Magnetic Compass being used to:

Locate center on circumference at any desired angle to the ground



Check table alignment in the horizontal plane



Ordering Information

Cat. Nr	Ordering Nr.	Height		Width	
		Inch	mm	Inch	mm
MBP/01	01690	5-5/16	135	4-3/4	121

19 UNIVERSAL SURFACE GAUGES

SG-047

SG-912

SG-1218

ESP Gramil torreta basculante FR Trusquins de Mécanicien - Base prismatique DE Oberflächenlehre

A basic tool for machinists and toolmakers, the Universal Surface Gauge is used for accurately scribing lines, transferring measurements or probing surfaces in inspection work. Design incorporates

- A fully hardened and ground base which serves as an accurate reference surface
- A machined Vee groove in the base allows the gauge to be used conveniently on curved surfaces
- A Vee groove at the front end allows the spindle to adjust to any angle above or below the base allowing it to be used as a height gauge and also as a depth gauge.
- Two retractable pins allow the gauge to be located against the edge of a surface plate or T-slot for linear work
- A 1/4" (6.35 mm) hole in the spring loaded scriber holder allows a dial indicator to be attached conveniently making the gauge useful for checking flatness, parallelism, heights, depths etc.
- Grooves on the side of the base allow for comfortable grip
- Well tapered scriber for better sighting while working. The scriber tip is hardened to 55-60 HRC



SurfaceGaugebeingusedtoscribeahorizontal line parallel to the ground, on a workpiece



Ordering Information

Cat. Nr	Ordering Nr.	Base Dimensions		Spindle Length		Scriber Length	
		Inch	mm	Inch	mm	Inch	mm
SG/4-7	03200	2-3/16 x 1-5/8	55 x 40	7" With extra 4" spindle	175 mm with extra 100 mm spindle	3	75
u SG/9-12	03201	3-1/8 x 2-1/2	80 x 63	12" With extra 9" spindle	300 mm with extra 225 mm spindle	7	175
l SG/12-18	03205	4 x 3-1/2	100 x 90	18" With extra 12" spindle	450 mm with extra 300 mm spindle	7-9/32	185

u BESTSELLER | NEW

20 DIAL COMPARATOR STANDS

DCS-12

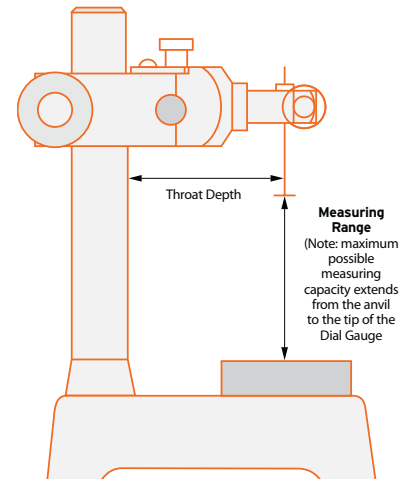
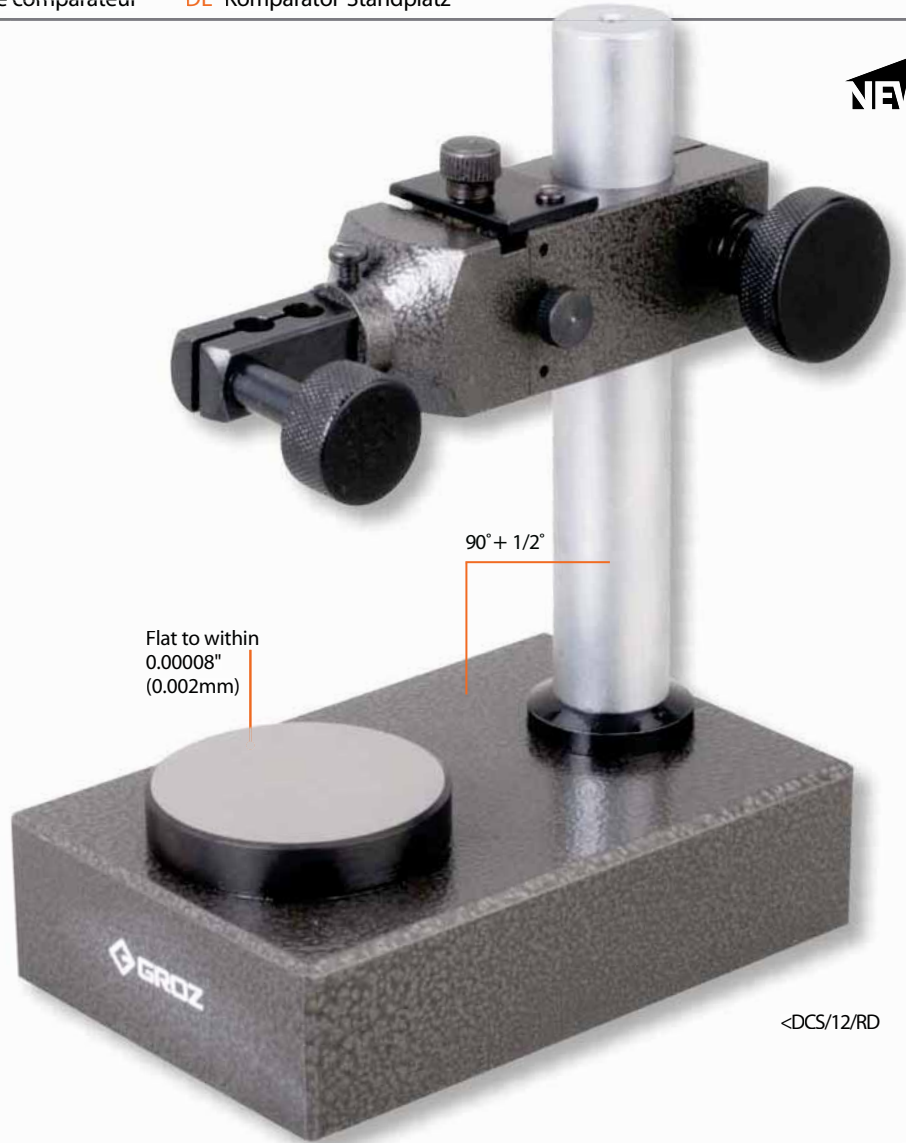
ESP Base soporte de control FR Table support de comparateur DE Komparator-Standplatz

Compact and versatile Comparator Stands especially useful for fast and efficient dimensional inspection on production parts

The stand comprises of a sturdy cast iron base precisely ground and machined providing a totally flat surface. The anvil is hardened 55-58 HRC for greater wear resistance and lapped for high accuracy setting of jobs

The longitudinal slide can be adjusted to different positions using the knurled knob. It moves along the ground steel pillar at accurate right angles to the base. Fine adjustment feature for accurate setting of jobs

NEW!



Ordering Information

Cat.Nr	Ordering Nr.	Anvil type	Anvil Size		Throat Depth		Measuring Range		Fine Adjustment	
			Inch	mm	Inch	mm	Inch	mm	Inch	mm
DCS/12/RD	01607	Round	2.3/8	60	3.1/4	83	4-3/4	120	1/8	3
DCS/12/RD/S	01608	Round & serrated	2.3/8	60	3.1/4	83	4-3/4	120	1/8	3
DCS/12/SQ	01609	Square	2.3/8	60	3.1/4	83	4-3/4	120	1/8	3

21 MICROMETER STAND

MCS-01

ESP Soporte para Micrometro FR Support de micromètres orientables DE Halter für Bügelmessschraube

An indispensable clamping device for precise and stable measurements, it is most useful to speed up production and quantity inspection jobs

The body is made of close-grained cast iron precisely machined to close accuracies. The swivel clamping pad is made from Aluminium which helps eliminate any damage to the measuring device

Both clamping and positioning of the micrometer is achieved using a single clamp

It is highly useful for sorting parts in batch inspection and for incoming inspection purposes



Ordering Information

Cat. Nr	Ordering Nr.
MCS/01	01610

22 ENGINEER'S TOOL SETS

ETS-1

ETS-2

ESP Juegos de herramientas para ingeniero FR Ensemble d' outils pour ingénieur DE Ingenieur Werkzeug-Satz

Two sets of quality tools suitable for turning and allied trades and for fitting and general trades. These sets come in handy and useful for the apprentice and the established engineer alike

Each set of tools is fitted into a specially designed durable wallet with the contents detailed on the wallet

EST/2/ST >



EST/1/ST >

Ordering Information

Cat. Nr	Ordering Nr.	Set Constituents
ETS/1/ST	03600	Inside Caliper 4" (100 mm) (ID/4) Outside Caliper 4" (100 mm) (OD/4) Screw Cutting Gauge (SCG-4714) Steel Rule 6" (150 mm) (SR/6) Pocket Scriber 3-1/2" (89 mm) (MS/P/3) Center Punch - 5/32" (4 mm) CP/5-32
u ETS/2/ST	03601	Engineer's Precision Square 4" (100 mm) (SS/A/4) Jenny Caliper 6" (150 mm) (JC/6) Steel Rule 6" (150 mm) (SR/6) Double Ended Scriber 7-1/2" (190 mm) (MS/7) Centre Punch - 5/32" (4 mm) (CP/5-32) Adjustable Tap & Reamer Wrench - DIN 1814 (ATWR/D-1) Spring Divider 4" (100 mm) (DD/4)

u BESTSELLER

23 EDGE & CENTER FINDERS

ESP Localizador de bordes y centros FR Pinule De centrage DE Kantentaster, mechanisch

Edge & Center Finders are time saving positioning tools for use in jig boring, milling machines etc. These are used for accurately locating work edges, shoulders, grooves, center points & scribed lines

Manufactured from precision ground tool steel, these are case hardened 45-48HRC

The diameter & cocentricity are controlled to within 0.0002" (5 microns)

Center Finder
The Center Finder will pick up cross lines to drill or bore holes



Combination Edge & Center Finder
One tool serves two purposes. It will find centers and also locate work edges



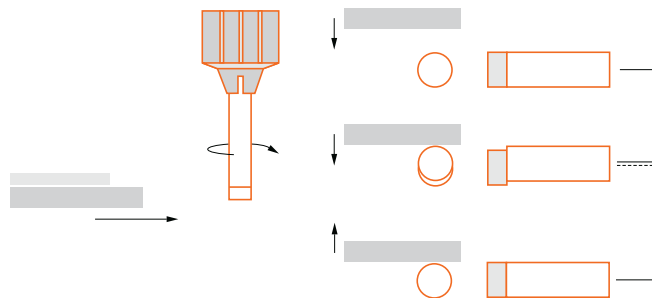
Edge Finder
Edge Finders accurately locate work edges, shoulders, grooves etc.



Ordering Information

Cat. Nr.	Ordering Nr.	Tip Diameter	Shank Diameter
Center Finders			
EF/3	03502	---	1/2"
EF/9	03509	---	3/8"
Combination Edge & Center Finders			
EF/6	03506	0.20"	3/8"
EF/5	03504	0.20"	1/2"
Edge Finders			
EF/2M	03501	10 mm	10 mm
EF/12	03511	4 mm	10 mm
EF/13	03512	10 mm	10 mm
EF/1	03500	0.20"	3/8"
EF/4	03503	0.20"	1/2"
EF/11	03510	3/8"	3/8"
EF/8	03508	1/2"	1/2"
Double Edge Finder			
EF/7	03507	0.20"	1/2"
Sets			
EF/1-5-7-8/ST	03550	A set of 4 Edge Finders and combination Edge and Center Finders containing one each of EF/1, EF/5, EF/7 & EF/8	
EF/3-4-6-9/ST	03551	A set of 4 Edge & Center Finders containing one each of EF/3, EF/4, EF/6 & EF/9	

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Using Edge Finders

1. Hold the edge finder in a collet or chuck.
2. Traverse work table to obtain contact between the rotating edge finder and the work
3. Contact will shift to a position concentric relative to the edge finder body.
4. With very slight table adjustment, contact will move off center with a distinct wobble. Stop adjustment at this point and slide back table slightly to bring the edge finder back to concentricity
5. At this point, the center of the finder is exactly half the diameter of the contact from the work edge, thus allowing accurate location for other machining operations relative to the edge

Using Center Finders

1. For locating center points and scribed lines, the pointed contact is used by putting a pencil or rule against the center point and running it concentrically
2. The point of the center finder is brought down to the center point/ intersection of scribed lines and table adjusted so that when the tool just touches the work, the line up with the center point can be ascertained

24 ELECTRONIC EDGE FINDER

EF/EC

ESP Localizador Electronico de bordes y centros FR Électronique Pinule De centrage DE Kantentaster

An easy, accurate & time saving tool for precisely locating work edges, shoulders, grooves etc. for use both on conventional & CNC machines

Edge finder body is made from Aluminum, with a precisely ground cylindrical steel stylus, 6 light ports, LED & a 12V battery

Edge finder lights instantly when the stylus touches the work edge. Designed with 6 equally spaced light ports for visibility from any angle

Reads off any electrically conductive metal

Concentricity within: $\pm 0.0005'' (\pm 0.013 \text{ mm})$




Ordering Information

Cat. Nr	Ordering Nr.	Shank Dia.	Cylindrical Head Dia.
EF/EC/1-2/0.2	03540	1/2"	0.20"

25 ELECTRONIC & AUDIBLE EDGE FINDERS

EF/2D

ESP Localizador de bordes-Electronicoy Audible FR Pinule Decentrage-Électronique et Audible DE Kantentaster-Elektronische und Vernehmbare

Designed for 2D aligning of component reference surfaces & edges, determining bore centres with reference to the centre of the machine spindles

Edge finder has an Industrial Robust & non wearing design, with the body made from hardened steel & a spring loaded highly accurate steel ball

On contact between the spherical tip & the metal component, the unit lights up, thus identifying the point of reference

The Audible version in addition to lighting up, also triggers alarm

All functional parts are hardened & accurately ground

Reads off any electrically conductive metal

Comes complete with batteries (12V Pencil)

Concentricity controlled to within $\pm 0.0004'' (\pm 0.010 \text{ mm})$




< EF/2D/1-2/0.2



< EF/2D/AD/1



< EF/2D/1

Ordering Information

Cat. Nr	Ordering Nr.	Type	Shank Dia.	Ball Dia.
EF/2D/1-2/0.2	03538	Electronic	1/2"	0.200"
EF/2D/1	03535	Electronic	3/4"	0.400"
EF/2D/AD/1	03537	Electronic & Audible	3/4"	0.400"



Edge Finders being used to locate the edge of a job held in a milling vice

26 WIGGLER OR CENTER FINDER

WZ-6

ESP Localizador de centros FR Jeu de centreurs DE Mittelsucher

Wiggler/Center finder with its four interchangeable attachments is a versatile tool that finds application in many places

The attachments can be snapped onto the chuck without removing the collet nut and are clamped by a ball swivel joint which permits adjustment to an angular position

With needle point shank, working centers can be accurately located. Spring tension on the ball of the point permits guiding the point to true concentricity bringing perfect alignment between the work and machine spindle

Wiggler with Ball Contact is useful in locating work by first bringing the ball contact against the work and then indexing it to the desired position relative to the spindle

Wiggler with Disc Contact is particularly useful in locating work in confined areas such as slots or shallow holes. Diameter of Disc. 0.1"

Wiggler with Offset Indicator holder is useful for checking run out or concentricity and in checking straightness or alignment of flat surfaces

Ordering Information

Cat. Nr	Ordering Nr.	Description
WCF/WZ-6	03520	Center Finder complete with 4 attachments.



Needle Point shank being used to locate center on workpiece



27 ELECTRONIC HEIGHT OFFSET GAUGE

HOG

ESP Calibrador Electronico De Desviacion De Altura FR La Jauge Electronique D'offset De Hauteur DE Elektronische Höhen-Offsetlehre

A convenient, accurate and time saving tool for knowing the height offset of the work piece from the cutting tool

Gauge lights up instantly when the cutting tool touches the probe on the gauge resting on the work piece

Hardened and precision ground body. 4 equally spaced light ports for visibility from any angle. Spring loaded probe safeguards against damage from overrun. Reads off any electrically conductive metal

Suitable for use both on conventional and CNC equipment

Gauge height controlled to within $\pm 0.0002"$ ($\pm 0.005\text{mm}$)

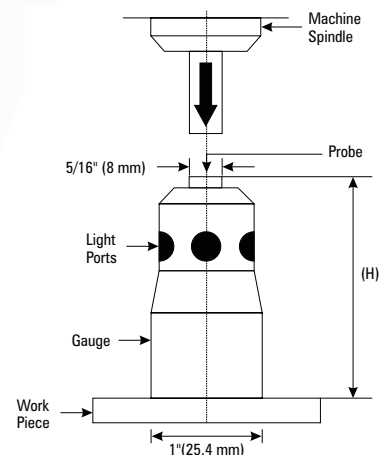
Body nominal dia: 1" (25.4mm)

Probe nominal dia: 5/16" (8mm)

Furnished with bulb, 3 numbers of 1.5V button cells and protective case

Ordering Information

Cat. Nr	Ordering Nr	Gauge Height (H)
HOG/2	03560	2"
HOG/50	03561	50 mm



NEW!

28 SCRIBERS

ESP Aguja de trazar FR Pointe à tracer DE Reißnadel

Groz manufactures a comprehensive line of steel and aluminium body scribers for machinist's, engravers, mechanic's and craftsmen

Basic tool for scribing and marking, Scribers can be used on metal, glass, plastics and ceramics. Scriber points are hardened 55- 60 HRC. Scribers are finely tapered permitting better sighting during work



ALUMINIUM BODY SCRIBERS

MS/7/Al: Light weight double ended scriber with one straight point and the other bent at 90° making it convenient to use in confined spaces

MS/380A: Three Point Scriber. Finest quality scriber with aluminium body knurled for comfortable grip. Comes with 3 interchangeable threaded steel points: short straight, short bent & long bent which thread into the body

MS/380B: Two Point Scriber. With aluminium knurled body, this scriber consists of short straight and short 90° bent steel points which thread into the knurled body



Ordering Information

Cat.Nr.	Ordering Nr.	Overall Length	
		Inch	mm
Aluminium Body Scribers			
MS/7-AL	03222	8-13/32	215
MS/380A	03227	9 & 12	225 & 300
MS/380B	03228	8-1/2	216
Steel Body Scribers			
MS/3/ST	03220	9 & 12	225 & 300
MS/4	03212	4-1/2	114
MS/MG/6	03221	6	150
MS/P/3	03214	3-1/2	89
MS/ST/9	03215	7	175
MSCP/6	03217	6-3/4	170
MS/7	03210	7-1/2	190
MS/H/8	03211	9-1/16	230
MS/81	03224	6	152
MS/83	03225	4-15/16	125
MS/84	03226	5-5/16	135
MS/85	03229	4-1/2	114

u BESTSELLER | NEW



STEEL BODY SCRIBERS

MS/3/ST: Steel body with 3 interchangeable threaded points, short straight, short bent and long bent. Very handy as different combinations can be used for different applications

MS/4 : Single ended light duty

MS/MG/6: Tungsten carbide tip for marking on hard materials. Permanent magnet on the other end for picking up small metal parts

MS/P/3: Scriber with pocket clip. Scriber point is held by a knurled chuck and can be reversed when not in use preventing tearing of clothing when clipped on a pocket

MS/ST/9: Single ended heavy duty

MSCP/6: Double ended. Combining a needle point with a chisel end

MS/7: Double ended with one straight point and the other point bent at 90° making it ideal for use in confined spaces

MS/H/8: Double ended heavy duty with one straight point and the other bent at 90°. Ideal for heavy marking jobs in confined spaces, grooves etc.

NEW!

MS/81 & MS/83: Pocket Scribers with replaceable hardened and ground tool steel points. Point reverses into the knurled body for safety. Hex head cap prevents the scriber from rolling down. Used for marking & scribing on steel, copper, brass and aluminium

MS/84: Replaceable Needle Point Scriber with 4 extra needle points. Plated steel body with knurled handle and hex cap that prevents the scriber from rolling down. Spare needle points are stored in the handle under the cap. Used for marking & scribing on metal, glass, plastics & ceramics

MS/85: Single Point Scriber. Knurled steel body with hardened and tempered point

По вопросам продаж и поддержки обращайтесь:

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Россия (495)268-04-70	Киргизия (996)312-96-26-47	Казахстан (7172)727-132	