

## About Us : Specialised for DRO Systems & Milling Machine Sales & Service

- Digital Read-Outs
- Magnetic Scale
- Press Brake Scale
- Magnetic Linear Scale - Actuating Rod
- Glass Scale / Optical Measuring
- Encoders
- Conventional Milling Machine
- Linear Position Transducers

### Digital Read-Outs Systems for Machines & Automations



#### Specification :

- ⊕ 2, 3 or 4 Axis
- ⊕ User Designated Resolution
- ⊕ RS-232 Digital Output
- ⊕ Angle Measuring
- ⊕ Touch Probe Option
- ⊕ 8+1 Digit Display
- ⊕ 5 Language Options

#### Functions :

- ⊕ Axis Quick Zero Keys
- ⊕ Bolt Hole Circle / Arc / Line
- ⊕ Shrink Function
- ⊕ Trigonometric Calculator
- ⊕ Error Compensation
- ⊕ Rectangular Pocket
- ⊕ Centre Find
- ⊕ Tool Diameter Compensation
- ⊕ Last Position Save
- ⊕ Machine Reference Selection
- ⊕ Travel Limit
- ⊕ Undo
- ⊕ Pause / Sleep Mode

### Magnetic Scale



- ⊕ Socket System Sensor
- ⊕ Slider Integrated Body
- ⊕ Easy Mounting
- ⊕ High Resolution Up to 0,001 mm Resolution
- ⊕ High Accuracy
- ⊕ Spiral or Cable Option
- ⊕ Measuring Lengths Up to 100 m
- ⊕ Resistant to Humidity
- ⊕ Sturdy Metal Case
- ⊕ Protection Class IP67

#### Applications:

- ⊕ Machining Centers
- ⊕ PVC Cutting Machines
- ⊕ Wood Cutting Machines
- ⊕ Lathes, Milling, Drilling, Grinding Machines
- ⊕ Sheet Metal Working Machines
- ⊕ Marble Machines
- ⊕ Welding Machines
- ⊕ Bending Machines
- ⊕ Electrical Discharge Machines
- ⊕ Robotics / Material Handling
- ⊕ Glass Working Machinery etc...

## For Press Brake and Bending Machines



- ⦿ RS422 Differential Quadrature Output
- ⦿ Excellent Stability of the Signals
- ⦿ Contactless System
- ⦿ Robust Shielded Metal Enclosure
- ⦿ Fully Sealed, Protection Class IP67
- ⦿ Resistant to Dirt, Humidity and Dust
- ⦿ Withstands Shock and Vibration
- ⦿ Single Reference Marker
- ⦿ Compressed Air Inlet at the Scale End Blocks
- ⦿ Double Protection Along the Sliding Side (Four Lip Seals)

## Magnetic Linear Scale -Twin Bearing Actuating Rod



- ⦿ Stroke Up to 750 mm
- ⦿ Twin Bearing Actuating Rod
- ⦿ Incremental Measurement of Displacement
- ⦿ Push Pull or TTL Line Driver Output
- ⦿ Resolution: 5µm to 100 µm
- ⦿ Protection Class IP65
- ⦿ High Operation Speed 3 m/s
- ⦿ Infinite Mechanical Life

## LINEAR POSITION TRANSDUCERS

Potentiometric Measuring and Twin bearing actuating rod



- ⦿ Twin bearing actuating rod
- ⦿ Mountable over backlash free pivots heads with a large angle of free movement
- ⦿ Maximum angular movement up to  $\pm 30^\circ$
- ⦿ Potentiometric measuring stroke up to 750 mm
- ⦿ Absolute measurement of displacement
- ⦿ Resolution 0,01 mm
- ⦿ Very long life up to 100 million movements
- ⦿ High operating speed 5 m/s
- ⦿ The grooves provide an excellent alternative to the usual system
- ⦿ Excellent Linearity %0,2

LTP Series Potentiometric Linear Transducers are mainly used in :

- ⦿ Press Brake Machines
- ⦿ Marble Machines
- ⦿ Tension Control
- ⦿ Horizontal Band Saw Machines
- ⦿ Transfer Machines
- ⦿ Hydraulic Machines
- ⦿ Sheet Metal Working Machines
- ⦿ Bending Presses
- ⦿ Textile Machines

## GLASS SCALE / OPTICAL MEASURING

### Optical Linear Scales Slim Body



Length : 50 mm - 1000 mm  
Single or Double Sealing

- Optical measuring
- Glass scale
- Scanning unit guided on scale 5 via ball bearings
- Single or double gasket protection
- High resolution up to 0,001 mm
- 5 VDC TTL Quadrature or 1 Vpp sinusoidal
- Easy mounting
- Compact design
- High accuracy
- Measuring lengths 50 mm up to 1000 mm
- 60 m/min traversing speed
- Reference mark every 50 mm

### Optical Linear Scales Bold Body & Long Measuring



Length : 1100 mm - 12000 mm  
Single Sealing

- Optical measuring
- Glass scale
- Scanning unit guided on scale 5 via ball bearings
- Single gasket protection
- High resolution up to 0,001 mm
- 5 VDC TTL Quadrature or 1 Vpp sinusoidal
- Easy mounting
- Compact design
- High accuracy
- Measuring lengths 1.100 mm up to 12.000 mm
- 60 m/min traversing speed
- Reference mark every 50 mm

## Wire Encoders

Long Distance Measurement



- High resistance stainless steel wire
- 1 mm stainless steel wire diameter
- Measurement length 4.500 mm to 8.000 mm or optional
- Output signal: push-pull, HTL, TTL or RS422 Line Driver
- Very long life
- High accuracy
- High traverse speed
- High acceleration
- Protection class IP65

# Precision Milling Machines PRECICUT Make

SPECIFICATIONS	UNITS	3ES	3V/35	4V/4S	ACCESSORIES
<b>TABLE</b>					<b>STANDARD</b> <ul style="list-style-type: none"> <li>Electricals to suit AC supply voltage of 415 V.3 phase, 50 Hz.</li> <li>Spindle forward reverse switch &amp; emergency stop.</li> <li>Low Voltage electrical panel with E.M. contractors &amp; over load relays for all models.</li> <li>Operator's Manual</li> <li>Draw Bar</li> <li>One shot lube system</li> <li>Set of service tools</li> </ul> <b>OPTIONAL</b> <ul style="list-style-type: none"> <li>Coolant Equipment</li> <li>Machine lamp with bracket</li> <li>Digital read out system</li> <li>Power Drawbar</li> <li>Power feeds for table saddle &amp; knee. Traverses reduce by approx 70mm with power feed.</li> <li>Chip Tray</li> <li>Horizontal Milling attachment</li> <li>Cutter holding devices such as collets, end mill holders, stub &amp; milling arbors and boring heads.</li> <li>Work holding devices such as machine vices with or without swivel base, rotary table, dividing head, angle plates and sine table.</li> </ul>
Length x Width	mm	1270X230	1270X230	1370X254	
No. of Slots		3	3	3	
Width of Slots	mm	16	16	16	
<b>TRAVERSES (Manual)</b>					
Longitudinal (X)	mm	900	810	900	
Cross (Y)	mm	395	420	395	
Vertical Travel of knee	mm	350	400	350	
Ram Travel	mm	400	450	400	
Ram rotation about vertical axis	mm	360	360	360	
<b>SPINDLE HEAD</b>					
Motor Power	kw	2.2	2.2	2.2	
No. Of Speeds		16	Infinite / 16	Infinite / 16	
Speed Range*	rpm	70-4620	50-3550/70-4620	50-3550/70-4620	
Head Type		Modified Step	Stepless / Step	Stepless / Step	
Speed Change Levers		Single	Single	Single	
Spindle Taper		H30/R8	H30/R8	H30/R8	
Quil Travel	mm	127	127	127	
No. of power feeds		3	3	3	
Feed Rates	mm/rev.	0.04,0.08 0.15	0.04,0.08 0.15	0.04,0.08 0.15	
Head Swivel					
To left & right	deg	90-0-90	90-0-90	90-0-90	
Towards & away from column	deg	45-0-45	45-0-45	45-0-45	
<b>SPACE REQUIRED</b>					
Overall width x overall depth x overall height (approx)	mm	1500 X 1700 X 2120	1800 X 1600 X 2080	1850 X 1700 X 2150	
<b>MACHINE BODY</b>					
Slideways		XYZ Dovetail	XYZ Dovetail YZ Square	X Dovetail YZ Square	
Column Type		Square	Square	Square	
Net Weight (approx)	kg	1200	1350	1400	

\*In each range the low speed is possible by engaging the back gear while the high speed is through spindle direct drive.



**3ES**

- Unique modified step head design
- Better Cutting Performance
- X,Y & Z Axis Dovetail Slideways
- X & Y Axis "Turcite-B" Coated
- Double Wall & Ribbed body



**4V/4S**

- Heavy Duty Machine Body
- 1370 x 254mm Work Table
- Y & Z Axis Square Slideway
- X & Y Axis "Turcite-B" Coated
- Variable speed head for 4V.

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