

## Indicating Bench Snap Gage 852 TS



### Applications

- For rapid measurements of diameters of cylindrical parts (shafts, bolts and shanks)
- For measuring pitch, root and outside diameters of all kinds of external threads as well as serrations
- For thickness and length measurement
- Particularly suited for batch produced parts

### Features

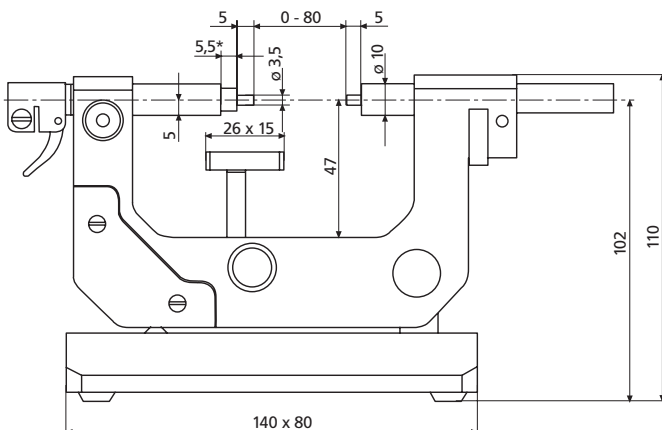
- Rugged steel frame, can be inclined up to 45° from the sturdy base
- Measuring spindle and anvil spindle are both made of hardened stainless steel, with mounting bore for insertion of interchangeable anvils
- Anvil spindle can easily be fine adjusted
- Height adjustable stop
- Constant measuring force as a result of built-in spring, thus eliminating user influence
- Universally applicable and extremely versatile, each instrument spans a broad measuring range
- Scope of supply: TC tipped-anvils, dia. D= 3.5 mm, Dial Comparator 1003

### Technical Data

Measuring range <sup>1</sup>		Retraction	Measuring force	Measuring face Parallelism	Mounting dia.	Order no.
mm	(inch)	mm	N	μm		
0 - 80	(0 - 4")	1.2	6.5	≤ 2	8 mm 8 mm .375"	4510030 4510031 <sup>2</sup> 4510035 <sup>2</sup>

<sup>1</sup> Depending upon which anvils are being used

<sup>2</sup> Excludes indicating instrument, order indicating instrument separately. Delivery with a different indicating instrument order separately



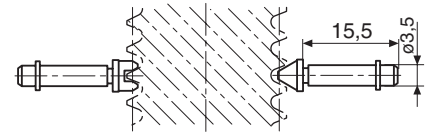
\* In initial position

### Accessories

	Order no.
Standard TC tipped-anvils, pair dia. D= 3,5 mm	4510840
Interchangeable Anvils please refer to Pages 9-21 to 9-23	
Thread Setting Plug Gages see Page 13-14	

## Interchangeable Anvils for 852, 852 TS and 853

For pitch, root and outside diameters. Special wear-resistant hardened steel. With cylindrical mounting shank and retainer ring which ensures locking while permitting rotation in bore of indicating snap gages.



### Sets consist of:

#### For pitch diameters

852 - 1 V-anvil and 1 blade  
853 - 1 V-anvil and 2 radiused blades

#### For root diameters

852 - 1 V-anvil and 1 blade  
853 - 1 V-anvil and 2 blades

#### For outside diameters

852 - 2 flat-face anvils  
853 - 3 flat-face anvils

## Anvils for pitch diameters for 852 and 852 TS

Metric thread (60°)			Whitworth thread (55°)			American UST thread (60°)		
Pitch	V-anvil	Blade	Pitch range	V-anvil	Blade	Pitch range	V-anvil	Blade
mm	Order no.	Order no.	tpi	Order no.	Order no.	tpi	Order no.	Order no.
0.2*	4173007	4173707	40 - 32	4173043	4173743	60 - 48	4173113	4173813
0.25*	4173008	4173708	32 - 24	4173044	4173744	48 - 40	4173114	4173814
0.3*	4173009	4173709	24 - 18	4173045	4173745	40 - 32	4173115	4173815
0.35*	4173010	4173710	18 - 14	4173046	4173746	32 - 24	4173116	4173816
0.4*	4173011	4173711	14 - 10	4173047	4173747	24 - 18	4173117	4173817
0.45*	4173012	4173712	10 - 7	4173048	4173748	18 - 14	4173118	4173818
0.5 - 0.7	4173000	4173700	7 - 4.5	4173049	4173749	14 - 10	4173119	4173819
0.7 - 1	4173001	4173701	4.5 - 3	4173050	4173750	10 - 7	4173120	4173820
1.25 - 2	4173002	4173702	3 - 2.5	4179408	4179410	7 - 4.5	4173121	4173821
2 - 3.5	4173003	4173703				4.5 - 3	4173122	4173822
3.5 - 5	4173004	4173704						
5 - 7	4173005	4173705						
7 - 9	4173006	4173706						

## Anvils for pitch diameters for Indicating Thread Snap Gage 853

Metric thread (60°)			Whitworth thread (55°)			American UST thread (60°)		
Pitch	V-anvil	Blade	Pitch range	V-anvil	Blade	Pitch range	V-anvil	Blade
mm	Order no.	Order no.	tpi	Order no.	Order no.	tpi	Order no.	Order no.
0.2	4173051	4174007	40 - 32	4173043	4176043	60 - 48	4173124	4176113
0.25	4173052	4174008	32 - 24	4173044	4176044	48 - 40	4173125	4176114
0.3	4173053	4174009	24 - 18	4173045	4176045	40 - 32	4173115	4176115
0.35	4173054	4174010	18 - 14	4173046	4176046	32 - 24	4173116	4176116
0.4	4173055	4174011	14 - 10	4173047	4176047	24 - 18	4173117	4176117
0.45	4173056	4174012	10 - 7	4173048	4176048	18 - 14	4173118	4176118
0.5 - 0.7	4173000	4174000	7 - 4.5	4173049	4176049	14 - 10	4173119	4176119
0.7 - 1	4173001	4174001	4.5 - 3	4173050	4176050	10 - 7	4173120	4176120
1.25 - 2	4173002	4174002	3 - 2.5	4179408	4179411	7 - 4.5	4173121	4176121
2 - 3.5	4173003	4174003				4.5 - 3	4173122	4176122
3.5 - 5	4173004	4174004						
5 - 7	4173005	4174005						
7 - 9	4173006	4174006						

## Carbide anvils for 852, 852TS and 853

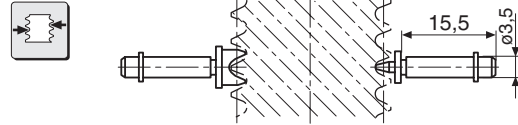
1.25 - 2	4511105	4511104
2 - 3.5	4511108	4511107
3.5 - 5	4511140	4511139
5 - 7	4511142	4511141

\* V-anvil covers 3 pitches

## Interchangeable Anvils for 852, 852 TS and 853

### For root diameters

Each pitch requires a separate V-anvil.  
Blade can be used for several pitches.



### Anvils for root diameters

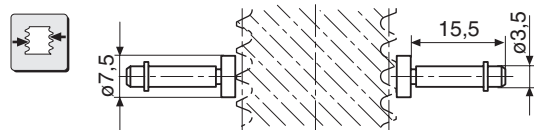
Metric thread (60°)			Whitworth thread (55°)			American UST-thread (60°)	
Pitch	V-anvil	Blade	Pitch range	V-anvil	Blade	The same anvils are to be used as with the Whitworth-thread (55°).	
mm	Order no.	Order no.	tpi	Order no.	Order no.		
0.5	4173213	4173719	40	4173331	4173833		
0.6	4173214		36	4173321			
0.7	4173215		32	4173332			
0.75	4173216		28	4173333			
0.8	4173217		26	4173335			
0.9	4173218		24	4173336			
1	4173219		22	4173337			4173840
1.25	4173221		20	4173338			4173843
1.5	4173222		19	4173339			
1.75	4173223	18	4173340				
2	4173225	16	4173342				
2.5	4173226	14	4173343	4173847			
3	4173227	12	4173345				
3.5	4173229	11	4173346	4173851			
4	4173230	10	4173347				
4.5	4173231	9	4173349				
5	4173233	8	4173350				
5.5	4173234	7	4173451		4173855		
6	4173235	6	4173453				
7	4173237	5	4173454				
8	4173238	4.5	4173455				
9	4173239	4	4173457			4173860	
		3.5	4173458				
		3.25	4173459				
		3	4173460				

### For outside diameters

#### Anvil 40 Za, flat

Measuring face dia. 7.5 mm  
with 853 smallest measurable O.D. dia. 5 mm

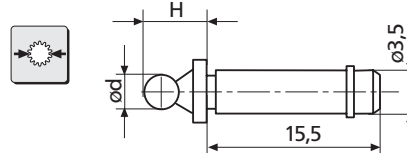
Hardened steel **Order no. 4173210**  
Carbide tipped **Order no. 4511190**



## Interchangeable Anvils for 852 and 852 TS

### Ball Anvils

For measuring gears and for special applications. Carbide ball. With cylindrical mounting shank and retainer ring.  
For mounting into mounting bores of thread micrometers 40 Z and 852.



Shank dia. 3.5 mm  
Shank length 15.5 mm  
Manufacturing tolerance  
Ball dia.  $\pm 2 \mu\text{m}$

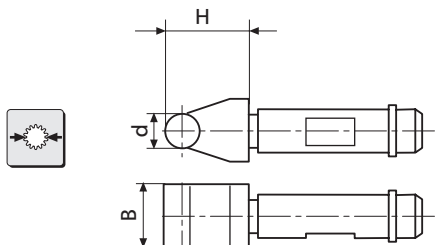
dia. d mm	H mm	Order no.	dia. d mm	H mm	Order no.	dia. d mm	H mm	Order no.
0.5	5.0	<b>4179150</b>	1.65	6.2	<b>4179168</b>	3.048	7.5	<b>4179182</b>
0.551	5.1	<b>4179151</b>	1.7	6.2	<b>4179169</b>	3.2	7.7	<b>4170570</b>
0.62	5.1	<b>4179152</b>	1.75	6.3	<b>4170553</b>	3.25	7.8	<b>4170566</b>
0.623	5.1	<b>4179153</b>	1.782	6.3	<b>4179170</b>	3.4	7.9	<b>4179183</b>
0.63	5.1	<b>4179154</b>	1.8	6.3	<b>4179171</b>	3.5	8.0	<b>4170558</b>
0.722	5.2	<b>4179155</b>	1.829	6.3	<b>4179172</b>	3.658	8.2	<b>4179184</b>
0.862	5.4	<b>4179156</b>	1.9	6.4	<b>4179173</b>	3.7	8.2	<b>4170571</b>
0.895	5.4	<b>4179157</b>	2	6.5	<b>4170554</b>	4	8.5	<b>4170559</b>
0.965	5.5	<b>4179158</b>	2.032	6.5	<b>4170568</b>	4.5	9.0	<b>4170560</b>
1	5.5	<b>4170550</b>	2.2	6.7	<b>4170569</b>	4.835	9.3	<b>4179185</b>
1.1	5.6	<b>4179159</b>	2.25	6.8	<b>4170564</b>	5	9.5	<b>4170561</b>
1.118	5.6	<b>4179160</b>	2.284	6.8	<b>4179174</b>	5.25	9.8	<b>4179186</b>
1.125	5.6	<b>4179161</b>	2.386	6.9	<b>4179175</b>	5.486	10.0	<b>4179187</b>
1.25	5.8	<b>4170551</b>	2.438	6.9	<b>4179176</b>	5.5	10.0	<b>4170562</b>
1.35	5.9	<b>4179162</b>	2.5	7.0	<b>4170556</b>	6	10.5	<b>4170563</b>
1.372	5.9	<b>4179163</b>	2.667	7.2	<b>4179177</b>	6.096	10.6	<b>4179188</b>
1.385	5.9	<b>4179164</b>	2.704	7.2	<b>4179178</b>	6.35	10.9	<b>4179189</b>
1.5	6.0	<b>4170552</b>	2.713	7.2	<b>4179179</b>	6.5	11.0	<b>4170567</b>
1.524	6.0	<b>4179165</b>	2.721	7.2	<b>4179180</b>	7	11.5	<b>4170572</b>
1.54	6.0	<b>4179166</b>	2.743	7.2	<b>4179181</b>	8	12.5	<b>4170573</b>
1.6	6.1	<b>4179167</b>	2.75	7.3	<b>4170565</b>	9	13.5	<b>4170574</b>
			3	7.5	<b>4170557</b>	10	14.5	<b>4170575</b>

Further sizes are available upon request (material: steel)

### Roller Blades

For measuring gears and for special applications. The measuring roller is made of carbide.  
To be mounted in the mounting bores of the 40 Z and 852.

Shank dia. 3.5 mm  
Shank length 15.5 mm  
Manufacturing tolerance  
Ball dia.  $\pm 2 \mu\text{m}$



dia. d mm	Dimension H mm	Dimension B ø mm	Order no.
1	5.5	5	<b>4510200</b>
1.25	5.8	5	<b>4510201</b>
1.5	6.0	5	<b>4510202</b>
1.75	6.3	5	<b>4510203</b>
2	6.5	5.5	<b>4510204</b>
2.5	7.0	5.5	<b>4510206</b>
3	7.5	5.5	<b>4510207</b>
3.5	8.0	5.5	<b>4510208</b>
4	8.5	5.5	<b>4510209</b>
4.5	9.0	5.5	<b>4510210</b>
5	9.5	6	<b>4510211</b>
5.5	10.0	6	<b>4510212</b>
6	10.5	6	<b>4510213</b>

Further sizes are available upon request (material: steel)