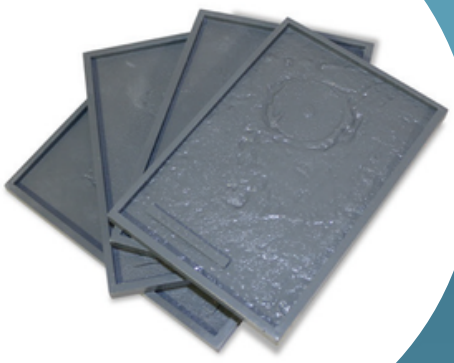
Expertise you can rely upon

For information regarding prices and availability:

https://castingstechnology.com/scrata-surface-comparators/#order



COMPARATORS FOR THE DEFINITION OF SURFACE QUALITY OF CASTINGS

Purchasers of castings can specify and assess surface quality and surface texture more accurately and definitively using tactile comparators developed by Castings Technology International (Cti). These provide a practical and functional alternative to photographic representation of casting surfaces in standards such as **MSS SP-55-2011.**

The comparators form the basis of **ASTM A802/A802M – 95 (2006) Standard Practice for Steel Castings, Surface Acceptance Standards, Visual Examination**. This standard comprises 31 comparators that define features such as:

- Surface Roughness (A)
- Surface Inclusions (B)
- Gas Porosity (C)
- Laps and Cold Shuts (D)
- Scabs (E)
- Chaplets (F)
- Surface Finish – Thermal Dressing (G)
- Surface Finish – Mechanical Dressing (H)
- Welds (J)
- Hot Tears
- Mechanical Dressing – Chipping

	Number of Comparators	Comparator Categories										
		A	B	C	D	E	F	G	H	J	Hot Tears	Chipping
ASTM A802	31	1-4	1,2, 4,5	1-4	1,2,5	3,5	1,3	1,2, 3,5	1,3, 4,5	1,2, 3,5	-	-

A larger, 48 comparator set applies to **ISO 11971:2008 Steel and Iron Castings – Visual examination of surface quality**; **BS EN 1370:2011 Founding – Surface roughness inspection by visual tactile comparators.** (Companies that already have the 'short' ASTM A802 set can upgrade to the larger set by purchasing the 17 additional comparator plates).

	Number of Comparators	Comparator Categories										
		A	B	C	D	E	F	G	H	J	Hot Tears	Chipping
Full Set	48	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-2	1
Upgrade Set	17	5	3	5	3,4	1,2	2,4	4	2	4	1-2	1

A third set of 14 comparators, the basis of **BS 7900:1998 Specification for examination of the surface texture of precision steel castings,** is applicable to the procurement of steel castings manufactured by precision casting techniques:

- Resin Shell Process (V)
- Lost Polystyrene Process (W)
- Shaw Process (X)
- Lost Wax Process (Y)
- Fettled Surfaces (Z)

	Number of Comparators	Comparator Categories				
		V	W	X	Y	Z
Precision Steel Castings	14	1-3	1-3	1-3	1-2	1-3

<u>Prices are as follows:</u>

ASTM A802 Set (31 comparators) £2,324.75
Full Set (48 comparators) £2,960.10
Upgrade Set (17 comparators) £1,660.16
Precision Castings (14 comparators and a copy of BS 7900:1998)£1,321.58

CASTINGS TECHNOLOGY