



# DENGENSHA NUT AND BOLT FEEDER CONSUMABLE TOOLING PARTS

TOP QUALITY
GENUINE PARTS
AND
GREAT VALUE
FROM THE LEADING MANUFACTURER
OF
AUTOMATIC FEEDING MACHINES
FOR WELD NUTS AND BOLTS



DENGENSHA Spare Parts and Consumables are designed to **Outperform pattern parts**and

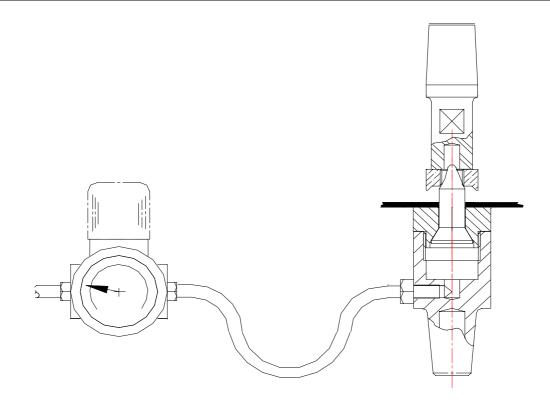
provide Great Value to our Customers
For more information contact:

#### Dengensha Europe Ltd

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# **DENGENSHA TOOLING FOR NUT WELDING**



# **ADVANTAGES OF THE DENGENSHA SYSTEM**

- 1. The Dolphin Nose shape of the Nut Guide Pin ensures that the Weld Nut is always located centrally on the Guide pin, thus eliminating the possibility of "Eye Lidding".
- Dengensha use a simple Air Pressure system to hold the Guide Pin in the Up position.
   Other systems use mechanical springs which are unreliable, prone to breaking and causing sticking of the Guide Pin and preventing correct positioning and welding of the weld nuts.
  - Also, other insulation parts are required to prevent electrical conductivity between the Guide Pin, Spring and copper Electrode Holder.
- 3. With the Dengensha system, when the Weld Nut and Guide Pin are pushed down by the Upper Electrode, air passes around the Guide Pin, blowing away any weld spatter and helping to stop the Guide Pin from sticking, assisting cooling of the tooling and minimising wear of the Electrode Cap.

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# new product line

## **ACT ALLOY GUIDE PINS**

While there are several guide pins available in the market, the **ACT** pins provide the latest in insulated locating pin technology at very competive prices and comfortably outperform KCF pins. Insist on **"Genuine ACT"** pins for your tool crib as opposed to lower performance alternatives and "lookalikes"

### The material features are:

- a) Not easily worn away and outperform KCF
- b) Good electrical insulation
- c) Excellent mechanical strength
- d) Capable of obtaining highly accurate dimensions
- e) Excellent high temperature strength

### **Coating Uniformity:**

ACT pins are micro-alloyed at the interface, resulting in a metallurgical bond between the insulating coating and the substrate, whereas lower quality guide pins depend on mechanical bonding with adhesive bond strength under 6,000psi.

Additionally, because of certain proprietary parameters used during the manufacture of ACT pins, the insulating film is uniformly distributed throughout the shape of the pin, unlike certain "lookalike" pins which have a non-uniform deposition at corners and sharp transitions, such as shoulders (e.g. in combination pins) which result in non-uniform stress distribution.

### Strength and Toughness:

The overall strength of ACT pins, defined by Rockwell hardness measurements, is at least 50Rc. For comparison, the overall strength of KCF pins is Rb, (meaning they do not even reach the C scale!). The film hardness of **ACT** pins is over 2,200 Vickers, again exceeding KCF pins which do not even come close to these values. **ACT** pins are produced in manufacturing processes optimized for resistance welding locating pins as opposed to some "lookalikes" that are manufactured alongside other parts which can sacrifice optimum conditions for guide pins.

**Refer to Page 4 for Part Numbers and Dimensions** 

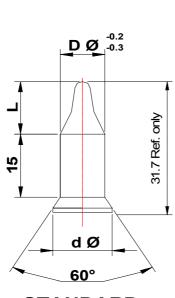
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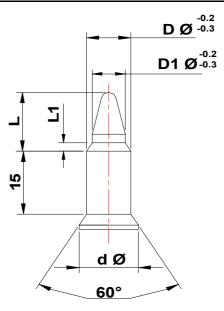
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### STANDARD NUT GUIDE PINS - ACT MATERIAL





**STANDARD** 

COMBINATION

PART No.			Gen	eral Dimensi	ons		
PARI NO.	ØD	Tol	ØD1	Tol	L	L1	Ød
TP-M04	5,0				5,5		12
TP-M05	6,0				7,5		12
TP-M06	7,0	-0.2		-0.2	9,5		12
TP-M07	8,0	-0.3		-0.3	10,5		12
TP-M08	9,0				11,0		12
TP-M09	10,0				11,0	/	12
_	_						_
TP-M06/08	8,8	-0.2	6,7	-0.2		2,0	12
TP-M08/10	10,8	-0.3	8,8	-0.3		2,5	16
TP-M10	11,0				12,0		16
TP-M11	12,0	-0.2		-0.2	13,5		16
TP-M12	13,0	-0.3		-0.3	15,0		16
TP-M13	14,0				15,0		16
TP-M14	15,0				16,0		21
TP-M15	16,0	-0.2		-0.2	16,0		21
TP-M16	17,0	-0.3		-0.3	17,0		21
TP-M16,5	16,5				17,0		21

Utilize a Dengensha Combination Pin when welding two sizes of nuts on one weld machine Weld 6mm and 8mm or 8mm and 10mm nuts without changing electrodes or pins

SAVES TIME AND MONEY

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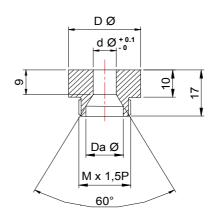
# DENGENSHA EUROPE



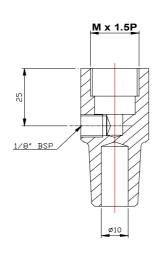
### RESISTANCE WELDING - AUTOMATIC NUT & BOLT FEEDERS

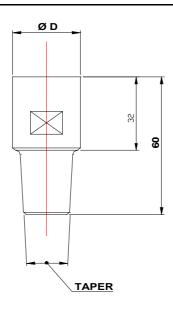
### **NUT WELDING - NUT ELECTRODE CAP**

PART No.	ØD	Ød	М	Øda
CN-M04	25	5	18	13
CN-M05	25	6	18	13
CN-M06	25	7	18	13
CN-M07	25	8	18	13
CN-M08	25	9	18	13
CN-M09	25	10	18	13
CN-M10	30	11	22	17
CN-M11	30	12	22	17
CN-M12	30	13	22	17
CN-M13	30	14	22	17



# **NUT WELDING - LOWER ELECTRODE HOLDER**





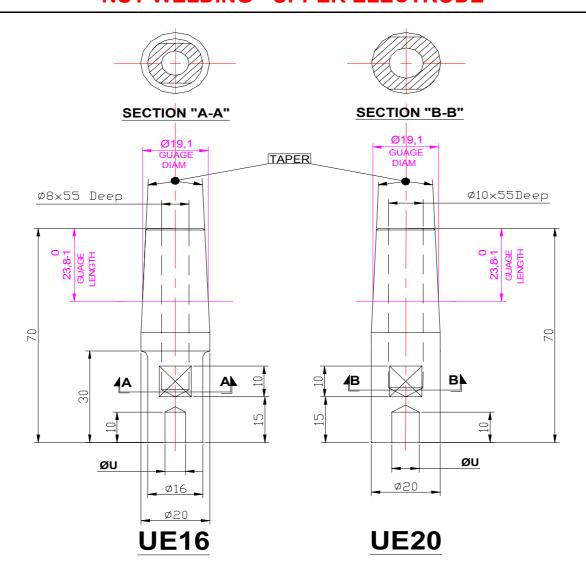
PART No.	ØD	TAPER	M Thread Pitch = 1,5
DH-25A	25	Ø 3/4" X 5° BS 807	M18
DH-30B	30	Ø 3/4" X 5° BS 807	M22
DH-25W	25	Ø16mm x 1 in 10 I.S.O.	M18
DH-30X	30	Ø16mm x 1 in 10 I.S.O.	M22
DH-25Y	25	Ø20mm x 1 in 10 I.S.O.	M18
DH-30Z	30	Ø20mm x 1 in 10 I.S.O.	M22
DH-25U	25	Ø18mm x 1 in 10 I.S.O.	M18
DH-30V	30	Ø18mm x 1 in 10 I.S.O.	M22

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### **NUT WELDING - UPPER ELECTRODE**



PART No.	ØU	TAPER
UE16-M04 (BS)	5,0	Ø 3/4" x 5° BS 807
UE16-M05 (BS)	5,0	Ø 3/4" x 5° BS 807
UE16-M06 (BS)	6,0	Ø 3/4" x 5° BS 807
UE16-M08 (BS)	7,5	Ø 3/4" x 5° BS 807
UE20-M06 (BS)	6,0	Ø 3/4" x 5° BS 807
UE20-M08 (BS)	7,5	Ø 3/4" x 5° BS 807
UE20-M10 (BS)	8,0	Ø 3/4" x 5° BS 807
UE20-M12 (BS)	9,0	Ø 3/4" x 5° BS 807

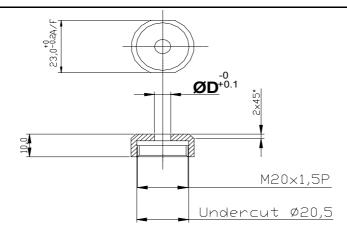
PART No.	ØU	TAPER
UE16-M04 (I.S.O)	5,0	Ø 20mm x 1 in 10 I.S.0.
UE16-M05 (I.S.O)	5,0	Ø 20mm x 1 in 10 I.S.0.
UE16-M06 (I.S.O)	6,0	Ø 20mm x 1 in 10 I.S.0.
UE16-M08 (I.S.O)	7,5	Ø 20mm x 1 in 10 I.S.0.
UE20-M06 (I.S.O)	6,0	Ø 20mm x 1 in 10 I.S.0.
UE20-M08 (I.S.O)	7,5	Ø 20mm x 1 in 10 I.S.0.
UE20-M10 (I.S.O)	8,0	Ø 20mm x 1 in 10 I.S.0.
UE20-M12 (I.S.O)	9,0	Ø 20mm x 1 in 10 I.S.0.

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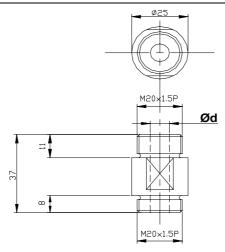


### **BOLT WELDING - ELECTRODE TIP**



BOLT THREAD Ø	Ø D	PART No.	ALTERNATIVE PART No.
M5	6,0	PFT-5012-M5	4B9879
M6	7,0	PFT-5012-M6	4B9880
M8	9,0	PFT-5012-M8	4B9881
M10	11,0	PFT-5012-M10	4B9882
M12	13,0	PFT-5112-M12	

### **BOLT WELDING - ELECTRODE HOLDER**



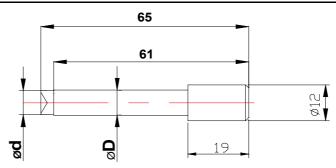
BOLT THREAD Ø	Ø d	PART No.	ALTERNATIVE PART No.
M5	8,0	PFT-5015-M5	4B9884
M6	8,5	PFT-5015-M6	4B9885
M8	10,5	PFT-5015-M8	4B9886
M10	13,0	PFT-5015-M10	4B9887
M12		PFT-5115-M12	

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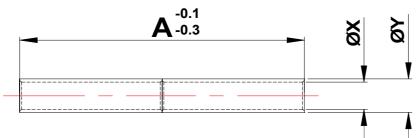


# **BOLT WELDING - GUIDE PIN (Stainless Steel)**



BOLT THREAD Ø	ØD	Ød	PART No.	ALTERNATIVE PART No.
M5	5,9	5,0	PFT-5011-M5	4C6304
M6	6,4	6,0	PFT-5011-M6	4C4802
M8	8,4	8,0	PFT-5011-M8	4C4803
M10	10,8	10,0	PFT-5011-M10	4C9298
M12	12,8	12,0	PFT-5111-M12	

# **BOLT WELDING - INSULATION GUIDE (ACT)**



BOLT THREAD Ø	ØX	ØY	PART No.	LENGTH "A"	QTY of PIECES
M5	6,0	Ø8,0 h8	PFT-5013-M5	37 mm	1 off 37mm
М6	6,4	Ø8,5 h8	PFT-5013-M6	37 mm	1 off 37mm
M8	8,5	Ø10,5 h8	PFT-5013-M8	37 mm	1 off 37mm
M10	11,0	Ø13,0 h8	PFT-5013-M10	37 mm	1 off 37mm
M12			PFT-5113-M12	37 mm	1 off 37mm
M5	6,0	Ø8,0 h8	PFT-5033-M5	57 mm	1 off 57mm
М6	6,4	Ø8,5 h8	PFT-5033-M6	57 mm	1 off 57mm
M8	8,5	Ø10,5 h8	PFT-5033-M8	57 mm	1 off 57mm
M10	11,0	Ø13,0 h8	PFT-5033-M10	57 mm	1 off 57mm
M12			PFT-5xxx-M12	57 mm	1 off 57mm
M5	6,0	Ø8,0 h8	PFT-5053-M5	82 mm	1 off 82mm
М6	6,4	Ø8,5 h8	PFT-5053-M6	82 mm	1 off 82mm
M8	8,5	Ø10,5 h8	PFT-5053-M8	82 mm	1 off 82mm
M10	11,0	Ø13,0 h8	PFT-5053-M10	82 mm	1 off 82mm
M12			PFT-5xxx-M12	82 mm	1 off 82mm

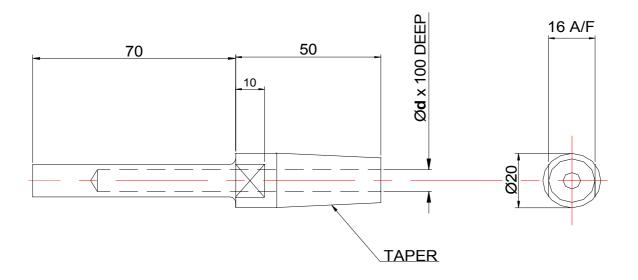
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## **BOLT WELDING - UPPER ELECTRODE**



PART No.	ØD	TAPER
UE20-BF-12 (BS)	12	Ø 3/4" x 5° BS 807
UE20-BF-14 (BS)	14	Ø 3/4" x 5° BS 807
UE20-BF-16 (BS)	16	Ø 3/4" x 5° BS 807
UE20-BF-18 (BS)	18	Ø 3/4" x 5° BS 807
UE20-BF-20 (BS)	20	Ø 3/4" x 5° BS 807

PART No.	ØU	TAPER
UE20-BF-12 (ISO)	12	Ø 20mm x 1 in 10 IS0
UE20-BF-14 (ISO)	14	Ø 20mm x 1 in 10 IS0
UE20-BF-16 (ISO)	16	Ø 20mm x 1 in 10 IS0
UE20-BF-18 (ISO)	18	Ø 20mm x 1 in 10 IS0
UE20-BF-20 (ISO)	20	Ø 20mm x 1 in 10 IS0

When Ordering Bolt Feeder Upper Electrodes ØD MUST be Bolt Head Diameter Less 1mm

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