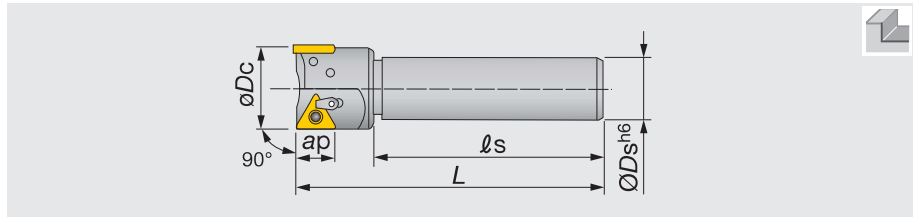


PES1500

Square shoulder endmills with triangle inserts

A,R, = +3°~ +5°, R,R, = -8°~ 0°



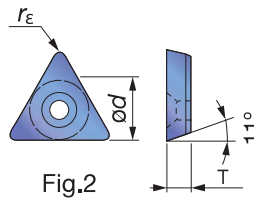
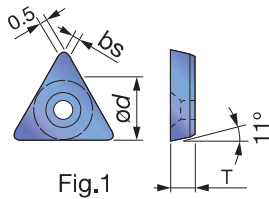
Designation	Max. ap	ϕD_c	z	ϕD_s	ℓ_s	L	Insert
PES1535R	19	35	2	32	120	160	TP*A43...
PES1540R	19	40	2	32	120	160	TP*A43...
PES1550R	19	50	3	32	120	160	TP*A43...

SPARE PARTS

Designation	Clamp set	Clamping screw	Wrench
PES15...	CSG-5T	CSTA-4	T-15D

INSERT

TPCA/TPMA



Shoulder Milling

P	Steel	★	★						
M	Stainless								
K	Cast iron								
N	Non-ferrous			★					
S	Superalloys								
H	Hard materials								

★ : First choice
☆ : Second choice

Designation	r_ϵ	Max. ap	Cermet			Uncoated					ϕd	T	bs	Fig.	
			NS740	UX30	TH10										
TPCA43ZTRW1	-	19			●							12.7	4.76	1	1
TPMA432TNW1	0.8	19	●	●	●							12.7	4.76	-	2

● : Line-up

STANDARD CUTTING CONDITIONS

ISO	Workpiece material	Grade	Cutting speed Vc (m/min)	Feed per tooth fz (m/min)
P	Mild steels	UX30	100 ~ 150	0.1 ~ 0.3
	Carbon steels	UX30	100 ~ 120	0.1 ~ 0.25
	Alloy steels	UX30	80 ~ 100	0.1 ~ 0.2
	Die steels 20 ~ 30HRC	UX30	50 ~ 70	0.1 ~ 0.2
K	Cast irons	TH10	70 ~ 90	0.1 ~ 0.3
N	Non-ferrous metals	TH10	200 ~ 500	0.05 ~ 0.2

- No. of revolutions (min⁻¹) = Cutting speed × 1000 ÷ 3.14 ÷ Cutter diameter
- Table feed (mm/min) = No. of revolutions × Feed per tooth × No. of inserts