Carbonitrided Steels - Brittle surface

1942

Grinding

	Steps	PG	FG	FG 2	FG 3
Surface	Type	SiC Foil #320	SiC Foil #500	SiC Foil #1200	MD-Largo
	Disc speed (rpm)	300	300	300	150
Abrasive	Type				DP-Susp. P 9 µm
	Predosing/dosing				3/6
Lubricant	Type	Water	Water	Water	DP-Blue
	Predosing/dosing				3/6
	Force (N)	30	30	30	30
	Holder direction	>>	>>	>>	>>
	Holder speed (rpm)	150	150	150	150
	Time (min)	1	1	1	7

Polishing

	Steps	DP	DP 2
Surface	Type	MD-Dac	MD-Nap
	Disc speed (rpm)	150	150
Abrasive	Type	DP-Susp. P 3 µm	DP-Susp. P 1 µm
	Predosing/dosing	3/6	3/6
Lubricant	Type	DP-Blue	DP-Blue
	Predosing/dosing	3/10	3/14
	Force (N)	30	20
	Holder direction	>>	>>
	Holder speed (rpm)	150	150
	Time (min)	5	2

Method comments

The method is developed to fit a standard equipment configuration with 30 mm specimen on 300mm disc. Dosing levels are valid for following equipment: Tegramin, AbraPol and LaboPol

For advice on how to adjust the method to fit your equipment, please take a look at Preparation Parameters.

The preparation time for the plane grinding (PG) step depends very much on the condition of the samples and if they are prepared as single specimens or clamped in a specimen holder. Please check the samples after the first step and repeat it if necessary.

Take a look at Preparation Parameters