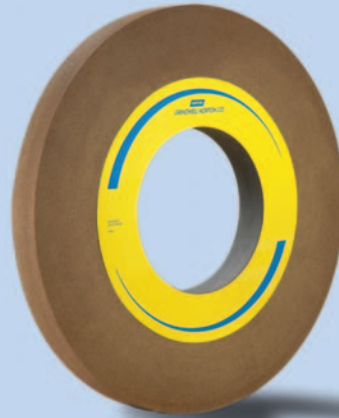


ROLL GRINDING WHEELS

**NORTON
ADVANTAGE**

An important constituent in our vast product portfolio, roll grinding wheels are preferred by rolling mills all over India for their high performance levels. These are supplemented by a range of roll scouring blocks.



TYPICAL APPLICATIONS

- ▶ Grinding work rolls and backup rolls used in
 - Hot mills
 - Sendzimer mills
 - Cold mills
 - Aluminium (Foil) mills
- ▶ Grinding chrome-plated rolls
- ▶ Grinding rubber rolls

Industry	Steel	General Engg	Paper Mill
Usage	●	●	●
	● Primary Use	● Secondary Use	

GOOD ROLL GRINDING WHEELS

FEATURES

- ▶ Revolutionary B24 bonds from Norton
- ▶ Improved B24X bond

BENEFITS

- ▶ Highly resilient
- ▶ Better finish
- ▶ Longer life
- ▶ Cool cutting, lower dressing frequency
- ▶ No metallurgical damage, better finish on jobs
- ▶ Lower power consumption

ROLL GRINDING

Mill type Category	Roll Type & Material	Abrasive Selection			Preferred Bond
		Best	Better	Good	
CRM	Work Roll Forged Steel	SG	19A	A	VS3, B24X
HRM	Work Roll Cast Iron	-	39C	37C	VK, B24
	Work Roll ICDP	SGG	39C	37C	VK, B24X
	Work Roll HcHcr	SG, SGLG	38A, 35AG	19A	B24X
CRP/HRM	Backup Forged Steel	SG	19A	A	VS3, B24
Paper	Rubber Coated	-	38A	-	VP2

- ▶ For steel rolls, type of Aluminium Oxide can be varied to suit material hardness.
- ▶ For CI & non ferrous rolls, Silicon Carbide is used and gives cosmetic effects on rolls.
- ▶ For high alloy steel rolls like HcHcr, having low machinability and high hardness, combination of SG and 39C should be used.

ROLL GRINDING WHEELS

SpecCheck

ABRASIVE	GRIT	GRADE	BOND
A, 35A, 33A	24	H	B24
37C	↕	↕	B24X
39C	320	N	B

APPLICATION	STARTING SPECIFICATION
Hot Mill	
Work Rolls - Chilled Cast Iron	39C 36 - JB24
Highchrome CI	38AG 36 - IB24X
Backup Steel	A 36 - JB24
Cold Mill	
Work Rolls	A 80 - JB24X
	A 120 - IB24X
Backup Rolls Forged	A 36 - JB24
Cast Iron	37C 36 - JB24
Roll scouring blocks	37C 80 - KVK
Rubber Rolls	38A 46I 96 VP2

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES	SUGGESTED CORRECTION
Poor quality finish	<ul style="list-style-type: none"> - Contaminated coolant - Grit collection in guard - Traverse too fast - Poor wheel dressing - Roll speed too slow - Infeed too heavy 	<ul style="list-style-type: none"> - Filter coolant and clean regularly - Clean and finish inside guard periodically - Reduce traverse rate - Dress correctly before finishing - Use plenty of coolant during dressing - Increase roll RPM - Reduce infeed for last few passes
Burn	<ul style="list-style-type: none"> - Roll speed too slow - Wheel too hard - Wheel needs dressing 	<ul style="list-style-type: none"> - Increase roll RPM - Reduce wheel speed, use softer grade - Dress wheel open with plenty of coolant
Chatter marks	<ul style="list-style-type: none"> - Hard wheel - Imbalance - Spindle/bearing - Centre lubrication - Belt whipping 	<ul style="list-style-type: none"> - Use softer grade wheel - Balance wheel properly - Replace worn out spindle/bearing - Ensure centre lubrication - Use belt of uniform cross section
Spiral feedliness	<ul style="list-style-type: none"> - Alignment - Hard wheel 	<ul style="list-style-type: none"> - Ensure wheel roll axis perpendicularity - Use softer grade wheel
Grit marks	<ul style="list-style-type: none"> - Coarse wheel - Soft wheel - Too much difference between rough and finish cycle - Grit pull out due to disintegration 	<ul style="list-style-type: none"> - Use finer grit - Use hard grade - Alter parameters - Control Ph of coolant
Scratch marks	<ul style="list-style-type: none"> - Dirty coolant - Disintegration of bond - Wheel loaded due to ineffective cooling 	<ul style="list-style-type: none"> - Use proper filtration system - Use coolant with proper pH - Improve coolant
Non parallel/ Tapered work	<ul style="list-style-type: none"> - Alignment - Soft wheel 	<ul style="list-style-type: none"> - Align works properly wrt centres and steady - Select proper grade
Out of round work	<ul style="list-style-type: none"> - Centre lubrication - Roll misalignment 	<ul style="list-style-type: none"> - Use proper lubrication, Clean centres - Align work properly on centres
Discoloration of work	<ul style="list-style-type: none"> - Wheel hard action - Improper coolant - Hard grade wheel 	<ul style="list-style-type: none"> - Manipulate soft action - Use correct coolant, Ensure sufficient coolant flow - Select proper grade
Shiny appearance	<ul style="list-style-type: none"> - Hard wheel - Oily coolant 	<ul style="list-style-type: none"> - Select proper grade - Use correct coolant
Loading	<ul style="list-style-type: none"> - Hard wheel - Less coolant 	<ul style="list-style-type: none"> - Select proper grade - Ensure sufficient coolant

BONDED ABRASIVES