

# CUT-OFF WHEELS FOR FOUNDRY ENVIRONMENTS



CUT YOUR  
CUTTING COSTS



**NORTON**

SAINT-GOBAIN®



# CUT-OFF WHEELS FOR FOUNDRY ENVIRONMENTS

The new Foundry X technology, combined with our existing abrasive blends, is engineered to increase cut rate and durability on a wide range of materials and machines in foundry applications.



## Cuts Costs

Lasts longer, cuts faster, reduces cycle time, **reducing the cost per part produced.**

## Versatile

Efficiently cuts a wide range of material types, including cast iron, alloyed and stainless steels

## Quick Service

Stock available for the most common wheel dimensions

A NEW RANGE OF CUT-OFF WHEELS TO LOWER YOUR TOTAL PROCESS COST



## FEATURES

- Improved thermal stability compared to existing Norton bonds B65 & B25
- High mechanical strength provided to the cut-off product
- Compatible with a wide range of abrasive blends, including premium grain technology (Norzon)

## BENEFITS

- Increased heat resistance results in longer abrasive life
- Performances assured in the most demanding cutting conditions
- Improved cut-rate provides shorter cycle time and lower total cost

The new Foundry X bond has been engineered to increase cut rate and wheel life in all your cut-off applications on a wide range of tough materials.

**FOUNDRY X TECHNOLOGY  
WILL CUT YOUR PROCESS  
COSTS BY UP TO 50%**

## MATERIALS

- Cast iron
- Low to high alloyed steel
- Stainless steel
- Aero alloys

## MACHINES

- Manual / swingframe
- Robotic semi/fully automatic
- Table / fixed spindle (workpiece manually driven to cut-off)
- Rotary cutting (tubes and round bars)

## APPLICATION EXAMPLES

- Motor blocks
- Ship propellers
- Pump housings
- Turbo charger housings
- Counterweights
- Machine parts
- Truck axes
- Brake cylinders
- Windmill parts
- Exhaust manifolds

## GRAIN AVAILABILITY

Norton Zirconia Alumina (w), Ceramic alumina grain, Aluminium oxide and Silicon carbide abrasive types are available pure or in blends to get optimized performances.

## CASE STUDIES

### NORTON NORZON WHEEL WITH FOUNDRY X TECHNOLOGY

Specification: 42\_508x6x76,2\_NZ 24 V BFX  
Application: Dry, Robot Traverse cutting  
Material: Cr (18-22%) refractory steel 58-60 HRC  
Cycle: Wheel speed =80m/s, Feed: 0,003 m/min

RESULTS VS. COMPETITOR

**G RATIO INCREASED +50%**  
**TOTAL COST PER PART REDUCED -32%**

### NORTON WHEEL WITH FOUNDRY X TECHNOLOGY

Specification: 41\_610x5,6x44,45\_A 24 T BFX  
Application: Dry, Robot Chop-Saw  
Material: Carbon Steel blocks, 127x127x355 mm  
Cycle: Wheel speed =80m/s

RESULTS VS. COMPETITOR

**G RATIO INCREASED +39%**  
**TOTAL COST PER PART REDUCED -24%**

## GRAIN AVAILABILITY

**BETTER**



SIGNIFICANTLY REDUCES CUTTING COSTS



### FEATURES

- Latest generation of Norzon grain with finer structure and sharper shape
- Excellent micro-fracturing properties

### BENEFITS

- Improved cut rate (removes material faster)- Reduced cycle time
- Lower specific cutting energy relative to previous technology

### GRAIN

Norzon grain blended with aluminium oxide or silicon carbide.

**GOOD**



COST EFFECTIVE FOR STANDARD APPLICATIONS



### FEATURES

- High performance aluminium oxide or silicon carbide grain
- Good choice for low to medium power machines

### BENEFITS

- Consistent performance range on standard applications
- Stable surface cut quality

### GRAIN

Durable or semi-friable aluminium oxide or silicon carbide.

# AVAILABILITY

## Stock Foundry X Cut-off Wheels



				BETTER ++++		GOOD +++	
TYPE	DIA	TXB	MOS (m/s)	SPECIFICATION	ART NO.	SPECIFICATION	ART NO.
41	400	4x40	80	NZ24TBFX NA	66253372431	A24TBFX NA	66253372430
41	500	5,5x40	80	NZ24TBFX NA4	66253372433	A24TBFX NA4	66253372432
41	600	6,5x60	100	NZ24TBFX NA6	66253372435	A24TBFX NA6	66253372434
42	400	5x76,2	80	NZ24TBFX DA4	66253372437	A24TBFX DA4	66253372436
42	500	6x76,2	80	NZ24TBFX DA6	66253372439	A24TBFX DA6	66253372438

Reduction rings are available to adapt the product to different spindle sizes.

## Make-to-Order Foundry X Cut-off Wheels

ABRASIVE	GRIT SIZE	GRADE	SHAPE	DIMENSION
Norzon (Zirconia Alumina), Ceramic Alumina, Aluminium Oxide and Silicon Carbide	20-36	P-V	41/42	400-815mm

## Commitments to sustainable development

### Our Vision

Be the global leader of reference in Abrasives, at the leading edge of innovation and service. Delivering the most comprehensive Abrasive Solutions to our customers.



### Our Values

#### Action

- Respect for the law
- Caring for the environment
- Worker health and safety
- Employee rights

#### Conduct

- Professional commitment
- Respect for others
- Integrity
- Loyalty
- Solidarity

### Minimize the environmental footprint of our operations with five priorities

- Increase the energy efficiency of our production
- Increase the use of recycled raw materials in our plants
- Reduce our CO<sub>2</sub> emissions
- Optimize our water resources
- Strict waste segregation policy

### A responsible & sustainable player

Founder member of FEPA and oSa, promoting the safety of abrasives

Sustainable development policies audited by VERITAS  
Sponsors of local community initiatives

Extensive roll out of international standards ISO 9001, ISO 14001, OHSAS 18001

Endorsers of UN's Caring for Climate and CEO Water Mandate for Water Resource Protection

Third party regulations, evaluations and policies

Member of the United Nations Global Compact

All Norton abrasive wheels are developed, manufactured and safety tested in accordance with the European standard EN12413, safety requirements for bonded abrasive products.

[www.norton.eu](http://www.norton.eu)

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Form # 2574

Front cover picture taken at Gieterij Drunen in the Netherlands