

Ultra-compact DURATIQ<sup>™</sup> technology



152%
productivity increase with system synergies\*

- Ultra-compact size and modular design for optimal ergonomics
- Available in 1-phase and 3-phase electrical variants
  - DURATIQ technology including a digital HMI for maximum control of machine performance

# POWER MEETS VERSATILITY

In September 2016, HTC set an entirely new standard for floor grinders with the new DURATIQ platform. HTC is now introducing a new addition to the series: HTC DURATIQ 5 – a unique combination of intelligence and raw power in a compact format.

The DURATIQ 5 is a floor grinder with unmatched versatility for professional users. With its ultra-compact size, it's a powerful tool for all types of grinding jobs in various environments, but without compromising on DURATIQ's unique technology.

Experience a machine that combines power and versatility with unmatched ergonomics.



4 | Versatility

One size. Two variants. Unlimited opportunities.



# **ELECTRICAL VARIANTS**

3 x 230 V 16 A /1 x 230 V 30 A 3 x 400 V 10 A 3 x 480 V 10 A

# **STANDARD**

Weight package 2 x 20 kg AirFlow<sup>™</sup> tool holder

# **OPTION**

Water package, MCS Lighting kit Cable Mug holder Phone holder







# **ELECTRICAL VARIANTS**

1 x 230 V 13 A

# **OPTION**

Weight package 2x20 kg Water package, MCS Lighting kit Cable Mug holder Phone holder

Shown with extra options.

Shown with extra options.

6 | Versatility

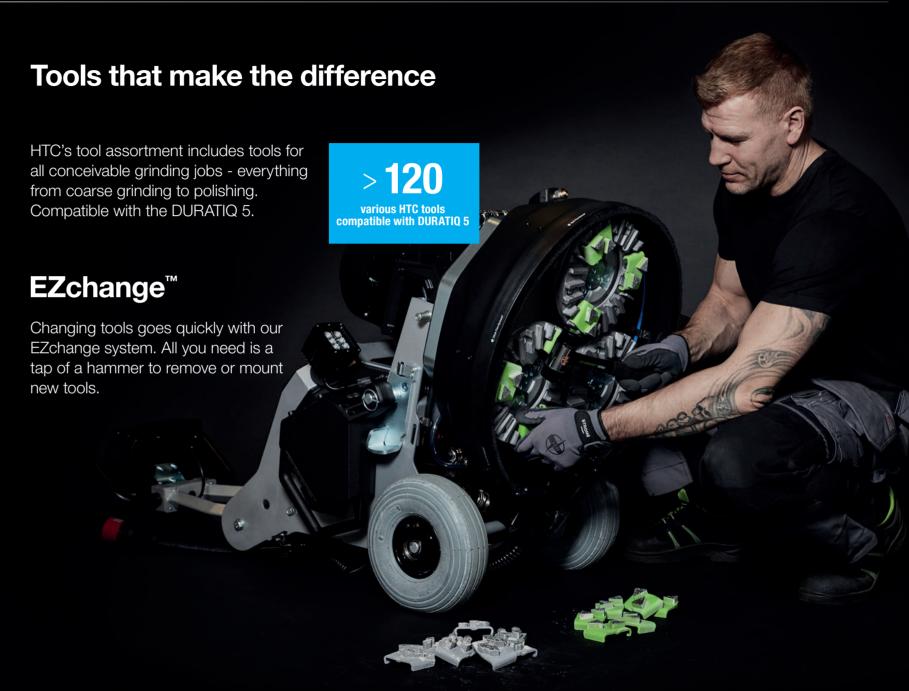
# One machine. Many applications.

- **Concrete**
- **Coating removal**
- **⊘** HTC Superfloor™
- (V) Terrazzo
- **Wood/parquet**
- ✓ Natural stone
- Limeston
- ( Granit
- Leveling compounds

The DURATIQ 5 is a multi-functional floor grinder. Whether the job requires grinding away a stubborn coating, smoothing a wood parquet floor or transforming a concrete floor into a high-gloss HTC Superfloor™, the grinder is up for the task at hand. The grinding width of 515 mm (22.4 inches) is best suited for small and mid-size surfaces, and its compact dimensions enable the grinder to be used in tight quarters.

With the integrated weights (optional on the 2.2. kW model), three different grinding pressures are available to help ensure the maximum grinding pressure no matter what the application. The weights can be easily removed before transport for easier handling.

Are you new to floor grinding? The DURATIQ 5 is a perfect entry model, and along with HTC's broad assortment of tools, you'll be fully equipped for a variety of grinding jobs.



# Take control of performance

Just as the larger models (6 & 8), the HTC DURATIQ 5 is equipped with an intuitive digital control panel (or HMI as we call it, for Human/Machine Interface). It'll give you all the control and precision you'll ever need to maximize grinder performance.

DURATIQ's proven HMI makes the grinder extremely easy to control and use, especially for operators with limited experience.

The difference is like driving a car with or without a dashboard.



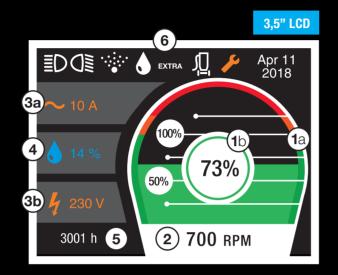
# **USB & CHARGING**

Download operational data, update software and charge your mobile devices.



# LOCK FUNCTION

Activate a PIN code for increased security and control of the machine.



# **Intuitive and smart**

- Power meter. Shows available (1a) and used (1b) power.
- 2. Grinding disc RPM
- 3. Motor current (3a) Voltmeter (3b)
- Water supply/ Mist Cooler System or Overload Protection

- 5. Counter.
  Hours (h)/
  Kilowatt hours (kWh)
- 6. Activated functions, service indicator, error messages, clock, date

**EXTRA** 



# Unique benefits within reach

- Operational info in real-time
- Control all functions from a single location
- Easy-to-use

10 | Productivity Productivity | 11

# A power pack to reckon with

Having ample electrical power for a grinder is fundamental. But being able to extract maximum power from the available supply cannot always be taken for granted. With the DURATIQ 5, the frequency converter (VSD), electrical components, motor (IE31) and grinding head interact so that as little energy as possible is lost.

Along with improved efficiency and precision, grinding performance increases to a level that is unique in the industry for this machine size.

The DURATIQ 5 can simply do more.



# Water makes the difference

DURATIQ features a number of innovations that all interact to increase efficiency. One of the most important optional functions for the DURATIQ 5 model is the MCS (Mist Cooler System<sup>1</sup>). The system sprays a fine mist of water on the floor, which cools the diamond tools during grinding and significantly improves performance. The results are increased grinding efficiency and service life for your HTC Original Diamond Tools.

The MCS is included as a part of the water package option, which also enables wet grinding with external connection of water hoses.

# Mist Cooler System

- Wide water jet with optimized angle
- On/off via control panel
- Three different water flows
- Easily accessible nozzle
- Auto-venting pump

# What is the difference?

DURATIQ 5 - 2.2 kW

41%

ncreased performance with MCS activated<sup>2</sup>

**DURATIO 5 - 4.0** kW

74%

with MCS activated

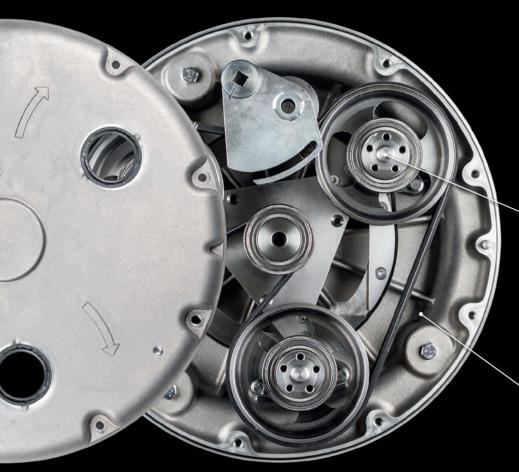
<sup>1</sup> Available as an option for both T5 2.2 kW and 4 kW.

<sup>2</sup> Refers to productivity tests conducted with a HTC DURATIQ T5 2.2 kW without MCS and a HTC DURATIQ T5 2.2 kW with MCS 3 Refers to productivity tests conducted with a HTC DURATIQ T5 4.0 kW without MCS and a HTC DURATIQ T5 4.0 kW with MCS

<sup>2</sup> Refers to productivity tests conducted with a HTC 420 and a HTC DURATIQ T5 2.2 kW without Mist Cooler System that produced 78% higher performance. The same test conducted with a HTC 500 and a HTC DURATIQ T5 4 kW without Mist Cooler System that produced 7% higher performance.

12 | Reliability

# Power and precision come from within



The actual heart of the DURATIQ 5, the grinding head, is based on the same innovative technology as the larger models 6 and 8. The dust-proof design and precision of the heavy duty components provide high reliability and increased precision for grinding results.

# **Heavy duty components**

Bearings and belts of very high quality along with high precision construction mean more operating hours and less downtime. Everything is hermetically sealed inside the grinding head to protect against dust and moisture. This means long service life for components.

# Precision-cast in two parts

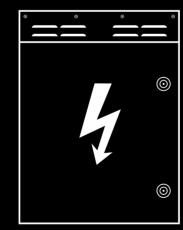
The entire head is cast in two parts with a precision fit, easy to open/dismantle. The parts are sealed with O-rings, to avoid messy sealants.

The new DURATIQ line is the most thoroughly tested machine in HTC's history. Three-thousand hours of meticulously monitored tests have been conducted both in test environments and under actual working conditions. Each component has been carefully selected to provide maximum reliability.

# **Keep out dust and moisture**

The electrical components on the DURATIQ 5 are neatly organized in a newly designed, dustproof cabinet. This significantly improves both reliability and serviceability.

Despite the fully sealed design, heat is kept at a lower level than in conventional electrical cabinets. You can also keep an eye on heat levels via the HMI panel and avoid downtime.



# 1. Dustproof cabinet

A sealed cabinet with external cooling keeps dust on the outside.

# 2. Less heat

Less heat produced in the cabinet significantly increases the service life of electrical components.

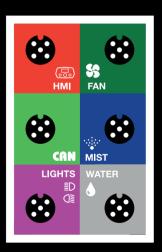
# 3. Fewer components

Fewer components in the cabinet mean less downtime and easier service.



\*Whichever occurs first.





# External panel for making connections

Easily connect equipment without needing to open the electrical cabinet.

# Versatile. And ergonomic.

The DURATIQ 5 is based on an entirely new chassis design with full attention to the center of gravity, adjustable weights, maneuverability and feel. This makes the DURATIQ 5 easier to operate, with better ergonomics and increased safety. The compact format and smart solutions, like the modular design and the possibility to retract the handlebar and weights, also make the DURATIQ 5 easier to transport. Who says that floor grinding has to be strenuous?

# MODULAR

The chassis is easily separated from the grinding head prior to transport. Quick coupling for motor cable.

# ERGONOMIC CARRYING HANDLES

Ergonomically designed handles are easy on the hands and facilitate lifting.

# **LINE OF SIGHT**

Compact design provides a better line of sight when grinding.

# **LED LIGHTING**

Three strong, freely positioned LED lamps provide great workplace lighting.



# REMOVABLE WEIGHTS, 2x20 kg

Ergonomically designed weights are easy to lift on and off. Large handles make them easy to handle. Stable on flat surfaces.

# LARGE, SOFT WHEELS

Large, soft, puncture-proof wheels make thresholds and stairs easier to navigate. 20 variable handle settings

Chassis weight (2.2 / 4 kW)

**50/57** kg

Grinding head weight (2.2 / 4 kW)

**72/82** kg

Extra weights (Standard on 4 kW)

**40** kg

TOTAL WEIGHT (4 kW incl. extra weights)

179 kg

16 | Configure your DURATIQ

# How to configure your DURATIQ T5

**Choose basic** 



**Choose optional** function



Choose



Lighting package



Weights, 2x20 kg



Electrical cable



Mug holder



Three grinding

Grinding width 515 mm

Phone holder

Technical specifications | 17

720 mm 28.4 inch





569 mm 22.4 inch

HTC DURATIQ 5



HTC DURATIQ 5 2,2 / 4,0 kW



1000 mm 39.4 inch

HTC DURATIQ 5



# **Technical** specifications

Model		HTC DURATIQ T5 2.2 kW	HTC DURATIQ T5 4.0 kW
Motor power	kW	2.2	4.0
Electrical variant		1 x 200-240 13 A	1 x 200-240 V, 30 A 3 x 200-240 V, 16 A 3 x 380-415 V, 10 A 3 x 440-480 V, 10 A
Total machine weight	kg	122	179
Chassis weight (incl. any weights)	kg	50	97**
Grinding head weight	kg	72	82
Grinding width	mm	515	515
Grinding pressure	kg	70*	78-88-119**
RPM, grinding discs	RPM	360-1200	360-1200
Water tank	Ľ	2.9  #	2.9  #
Grinding discs	Ø mm	3 x 230 mm	3 x 230 mm
Recommended minimum cable area	mm²	2.5	6/2.5

<sup>\*</sup> Weight package available as option and enables grinding pressure in three modes: 70, 88 and 119 kg
\*\* The model is equipped with weight package as standard

<sup>#</sup> Water tank included with water package option

# >75 new functions

DURATIQ 5 brings together HTC's extensive experiences with a completely new approach to all components.

# Grinding head

Longer service interval Longer service interval of 1,000 hrs.

# Increased torque

More torque means a stronger machine and improved grinding process.

# Stable grinding head

Two-part grinding head in cast aluminum produces less vibration and a more uniform scratch pattern.

# Sealed grinding head

Hermetically sealed grinding head protects essential components from moisture and dust. Dual sealing for moving parts.

# New improved bearings

The bearings have extended service life just like earlier DURATIQ models.

# Auxiliary bearings

Auxiliary bearings on each grinding shaft stabilize and increase service life.

# O-ring

O-ring seals the grinding head to make it easy-to-open/close the grinding head without the use of messy sealing agents

# Easily opened grinding head

Easy grinding head access saves considerable time during service.

## **Enclosed belts**

Belts protected by a dust-free and moisture-free enclosure provide longer service life.

# Long-lasting belts

Multi-rib belts for long service life.

# Integrated weights

Balanced and easy-to-handle weights with 3 different positions (forward, reverse and removed).

# Lifting points

Integrated lifting points on chassis.

# Tensioning points

Integrated tensioning points on chassis.

# Reliable wheels

Large and soft solid wheels do not get flats.

# Tires that leave no marks

High quality rubber that doesn't leave marks on the floor.

## Compact design

Shorter wheelbase and more compact design mean better line of sight and tighter turning radiuses compared to the previous HTC 420 model.

Easily tension the primary belt without openment steps for the handlebar brace. ing the grinding head.

# Newly designed grinding cover

With the elastic secondary belt, correct

Newly designed grinding cover without seals, makes it easier to clean.

# Grinding cover with improved dust collection

Automatic belt tensioning

tension is always assured.

Simple belt tensioning function

Better dust collection with newly developed floating grinding cover.

# New wear-resistant dust outlet

Optimal discharge flow for dust with new dust outlet that is easy to clean and replace as necessary.

# Heavy duty grinding holder bracket Improved durability and easier to change.

Same as DURATIQ 6 & 8.

# New bushings between chassis and grinding heads

# Bushings with more rubber reduce vibration.

# Ergonomic lifting handles Ergonomic handle design facilitates moving grinding heads.

6. Also enables use of all EZchange tools.

# Same grinder holder and tools Same 230 mm grinding holder as DURATIQ

# Chassis

Balanced center of gravity Easy to tilt the machine for tool replacement.

power for same amount of work.

(HTC 420/500).

and extends component service life.

# 20 different settings

Four rough adjustments and five fine adjust-

# Variable settings for handlebar

Easy to find right position with variable fine adjustment of handlebar. Handlebar can be gripped in many different ways.

# Suspended mug holder accessory

Place drinks in freely suspended holder on the handlehar

# Phone holder accessory

Holder that fits most phone models.

# Electrical connector with cable

Easier cable handling when tilting the machine, for example,

# Cover with quick fastener

The cover fastens with a magnetic lock and can be easily opened, which saves time during service.

# New placement of camlock connection Keep the hose connected to dust extractor

during tool replacement.

# Flexible hose handling

Free placement of dust hose using adjustable strap.

# Electrical

# Fewer unique electrical components per model

Simplifies inventory management and troubleshooting.

## IF3 motor

Higher motor efficiency. Machine uses less

# More energy efficient

Uses less power for same amount of work compared to previous models

# Sealed electrical cabinet

External cooling means a dust-proof cabinet and lower heat, which increases reliability

# Warning for high electrical cabinet temperatures

Temperature sensor warns of overheating via the HMI display.

# UL approved and certified

Complies with UL standard for US and Canadian markets.

# 24 VDC control voltage

Makes machine safer and with fewer components.

# Frequency converter of highest quality Vector-controlled for more torque.

CAN bus electrical system Future-safe and reliable electrical system.

# Standard fuses

All fuses are ATO midi type.

Electrical cable connection with strain relief.

# Quick connectors for electrical accessories

Connect accessories, such as lights, without opening the electrical cabinet.

# Integrated EMC filter

Produces low leak currents and minimizes problems with ground fault breakers.

# 3.5-inch color display

One display for all machine information and settings at a single location.

# Power meter

Shows available and actual power.

## RPM counter

Allows operator to control grinding head speeds.

# **Dual counter**

Shows total machine hours and kWh.

# Warning signals in symbol and text format

Clear warnings about operational problems on the screen prevent possible breakdowns.

# Service indicator

Information about service requirements. More information available via QR codes for digital support page on Internet

# Multi-faceted USB port

Recharge a phone, upgrade software or export log data.

# Choose direction of rotation

Option to choose direction of rotation for grinding discs.

# Remote connection of dust extractor

Turn off and on, clean the filter and receive information from the dust extractor via the HMI panel.

# PIN code

Block the machine from use by unauthorized persons with a PIN code.

## Adjustable display

Easily adjust the angle of the HMI display.

# Choose units of measurement

Display in either metric or imperial units of measurement

Time and date display on control panel.

# Time and date

Input voltage Gauge for input voltage provides overview of

# Motor current

Gauge for motor current shows actual

network quality, connecting cables, etc.

# Water flow control

The water volume used during wet-grinding can be controlled from the HMI panel. Automatic on/off during grinding.

# Water hoses with quick couplings Easy to check.

Water connection Easy access to water connection with quick coupling. Connected directly to water line.

# Easily accessible water filter Easily accessible, transparent water filter

under service cover.

Enclosed water tank Water tank with cap protects the system against dust. Easy to drain.

## Water level indicator

Warning for low water level via HMI panel on the machine

# Retrofitting of water package

Choose water package as option or install later, Water package includes MCS system.

# Airless MCS system

No need for venting the MCS system.

# New MCS pump

New self-venting water pump (24 VDC) with longer service life, more power and higher

## MCS with three flow modes

Controls water flow in three modes for Mist Cooler System (low, medium, high).

# Light

# Lighting control

Turn the lights on and off individually, front and back, via the control panel on the machine or remote control.

# Flexible LED lighting accessory

Retrofitting of lighting package

accessory. Retrofitted.

Choose the lighting package as an

Magnetic attachment and long spiral cables for flexible use.



New functions | 19



The DURATIQ 5 is a compact package of power that combines power and versatility in an entirely new way. Ultra-compact and at the same time fully equipped with the latest DURATIQ technology, the machine can handle even the toughest grinding jobs.

It's never been simpler – or more effortless

- to achieve impressive results.

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