



ROCK TOOLS
CUSTOMER DAY
TOP HAMMER SURFACE



TOP HAMMER XL

BIGGEST TH HOLES ON THE PLANET

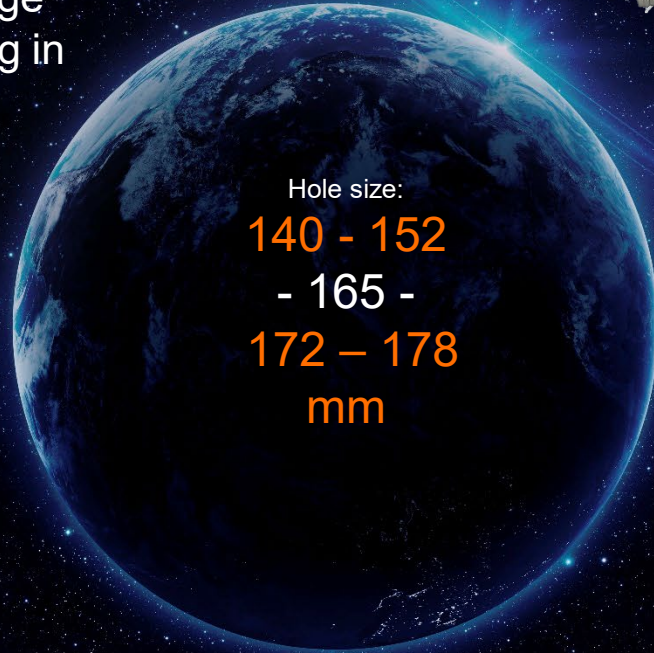


TOP HAMMER XL

A new drilling system for large hole size top hammer drilling in surface mining applications



PANTERA™ DP1600I
DRILL RIG



Hole size:
140 - 152
- 165 -
172 - 178
mm



RD1840C
ROCK DRILL



LT90
ROCK TOOLS



INNOVATED FOR THE FUTURE OF TOP HAMMER DRILLING

Sandvik is changing the industry by introducing this innovative top hammer drilling technology.

Top Hammer XL system expands the hole size range of top hammer drilling technology to 140 – 178 mm (5 ½ to 7”).

The drilling method is highly fuel-effective and can give you a considerable reduction when it comes to CO2 emissions.



HOW DOES IT WORK?

RD1840C ROCK DRILL

Long piston technology provides high impact energy with optimal pulse form.

The length of the pulse depends on the length of the piston.

Rock drill and tools are dimensioned to work together which gives the best possible drilling dynamics and rock breaking efficiency.



SANDVIK
RD1840C

Optimal pulse form -
the best drilling
efficiency.

Optimum penetration /
impact



PROVEN EFFICIENCY

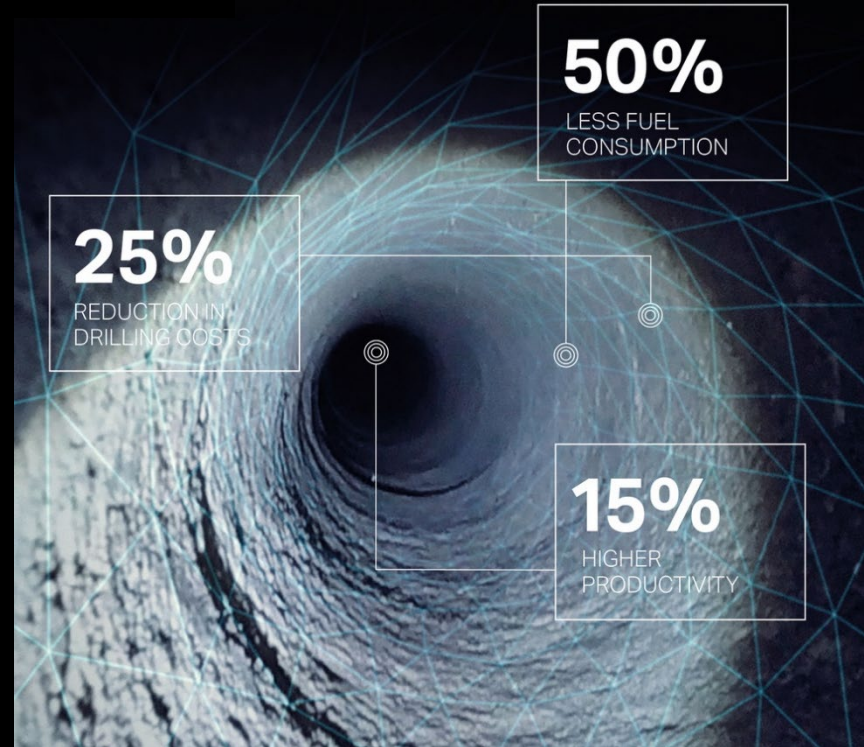
The system has been proven in several field tests by drilling more than 100,000 meters in challenging rock conditions. The test results show:

50% reduction in fuel consumption*

25% reduction in total drilling costs*

15% increase in productivity*

(* Results from field tests compared to DTH drilling method under specific controlled conditions)





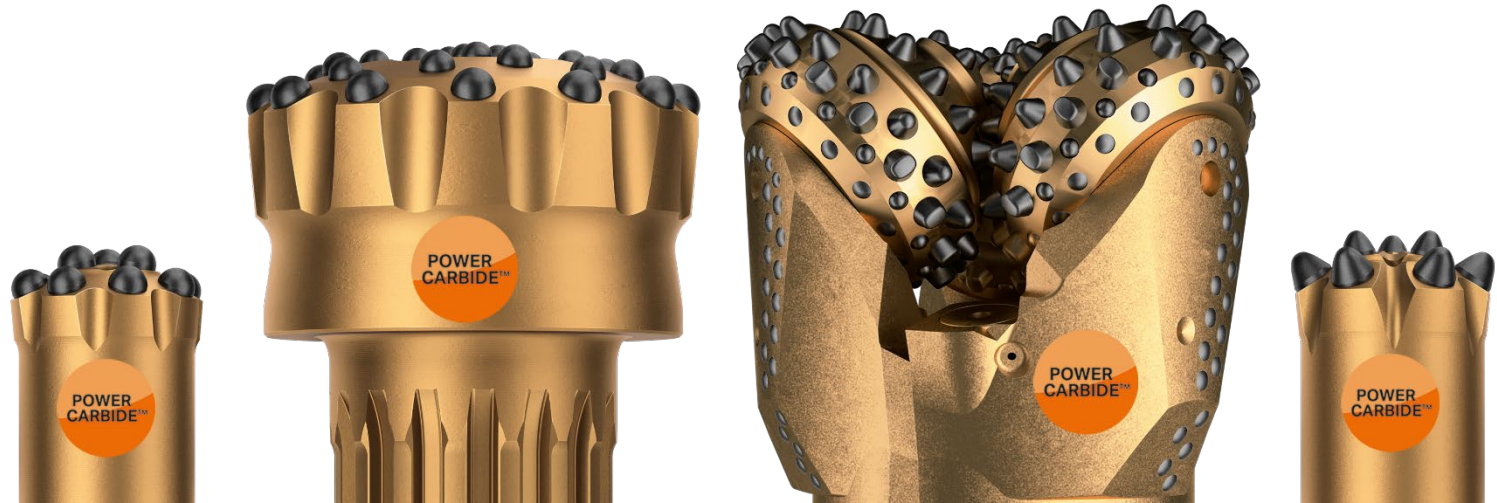
POWERCARBIDE™ FAMILY

GC81 AND SH70



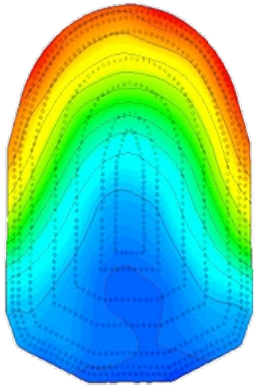
IT'S THE INSIDE THAT MATTERS

PowerCarbide™ is a gathering of our most powerful carbide grades. With its outstanding performance, PowerCarbide™ improves your results. In your drilling operation as well as in your business.

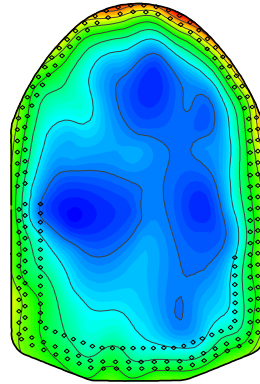


IGNORE THE LAW OF NATURE

POWERCARBIDE™



GC81



SH70

POWERCARBIDE™

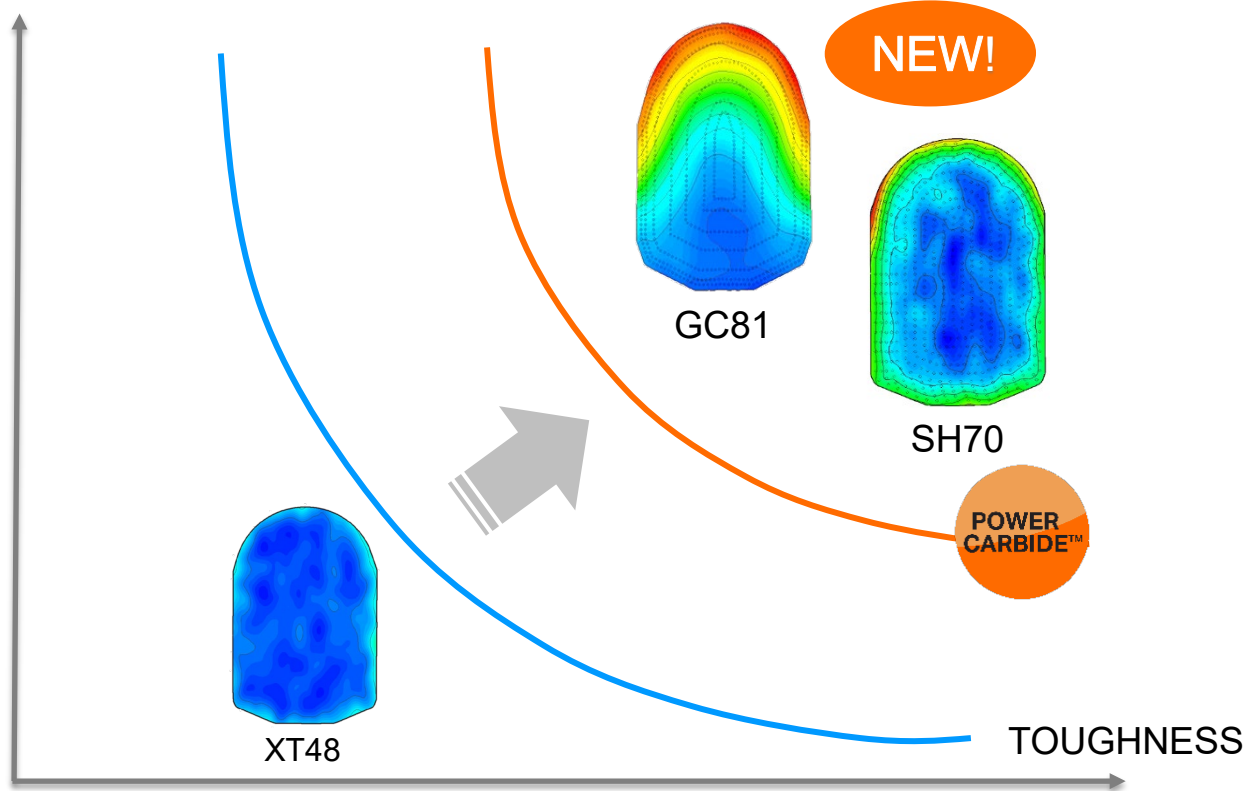
WHY?

1. Productivity
 - Buttons keeps its original shape longer
 - Drills faster and reduce deviation
2. Straightness
3. Grinding interval
 - Longer grinding interval makes more available time for drilling
4. Lower tools cost
 - Longer service life



POWERCARBIDE™

WEAR RESISTANCE

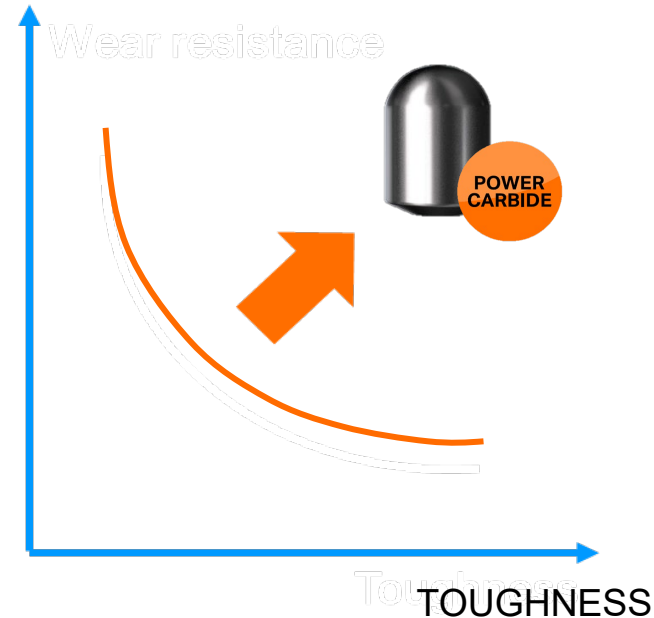


- Service life +20-80%
- Long grinding interval
- Safety and economy
- Full assortment
- All threads

THE POWER OF POWERCARBIDE™

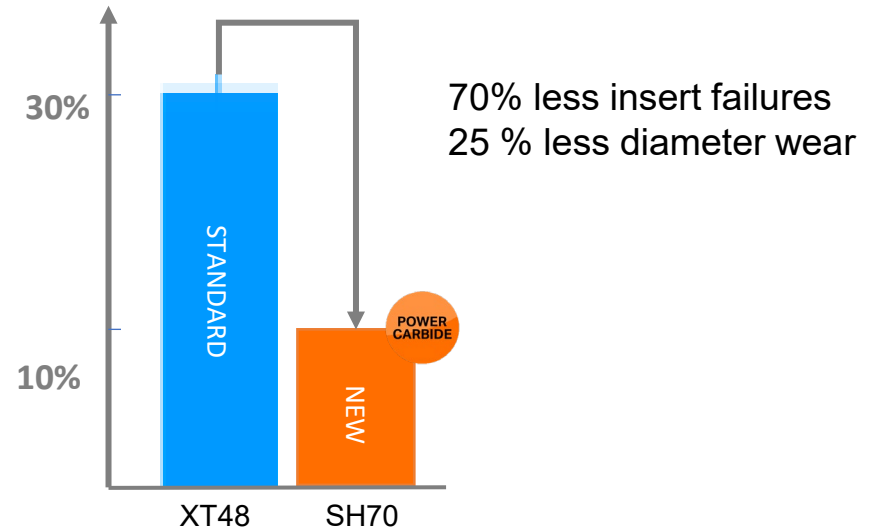
PERFORMANCE

WEAR RESISTANCE



CUSTOMER VALUE

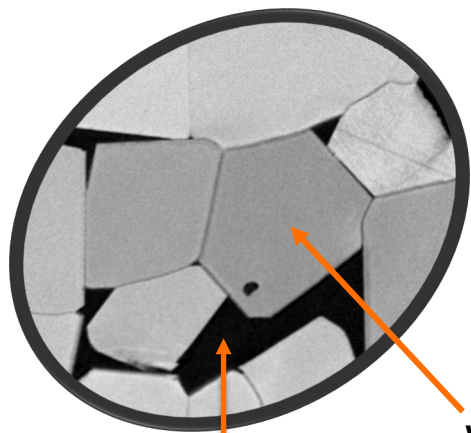
Bits discard due to carbide failure*



*Top hammer RTMS test, Australia 2018

POWERCARBIDE™ - IT'S THE INSIDE...

POWER
CARBIDE



Co

WC

CEMENTED CARBIDE DESIGN



PROCESS DESIGN

IDENTIFICATION

ONE GROOVE = SH70



TWO GROOVES = GC81





PRODUCT ASSORTMENT

POWERCARBIDE™ IN STANDARD THREADS

THREAD		PART NUMBER
T35	Ø54	7517-4654A-S81
T38	Ø64	7514-4664-R70
	Ø64	7514-4864A-R70
	Ø64	7514-4664A-S81
	Ø70	7514-4670-R70
	Ø102	7514-4902-S81
T45	Ø70	7515-4870-R70
	Ø70	7515-1870-S70
	Ø76	7515-4876-S70
	Ø76	7515-1876-S70
	Ø76	7515-4876-R70
	Ø76	7515-4876-S81
	Ø89	7515-4889-R70
	Ø89	7515-4889-S70

THREAD		PART NUMBER
T51	Ø83	7516-4883-R70
	Ø89	7516-4889-S70
	Ø89	7516-4889-R70
	Ø89	7516-4889-S81
	Ø89	7516-7089-S70*
	Ø89	7515-1876-S70
	Ø102	7516-4902-S70
	Ø102	7516-7002-S70*
	Ø115	7516-4915-S70
	Ø115	7516-7915-S70

*New front design

PRODUCT ASSORTMENT

POWERCARBIDE™ IN GT60 & LT90 BITS

THREAD		PART NUMBER
GT60	Ø102	7620-7002-S70*
	Ø102	7620-8102-S70
	Ø102	7620-4902-S70
	Ø115	7620-4915-S70
	Ø115	7620-8115-S81
	Ø115	7620-8115-S70
	Ø115	7620-7915-S70
	Ø127	7620-4927-S81
	Ø127	7620-4927-S70
	Ø140	7620-1940-S70
	Ø140	7620-4940-S70

THREAD		PART NUMBER
LT90	Ø140	7532-4940-S70
	Ø152	7532-4952-S70
	Ø165	7532-4965-S70
	Ø172	7532-4972-R70
	Ø178	7532-4978-R70

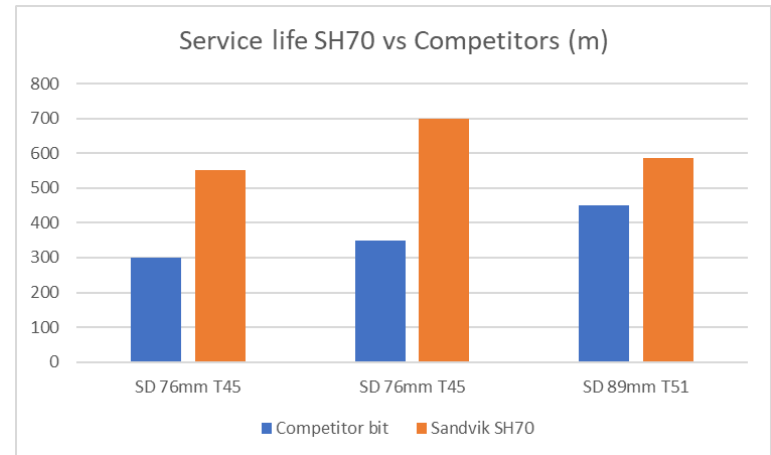
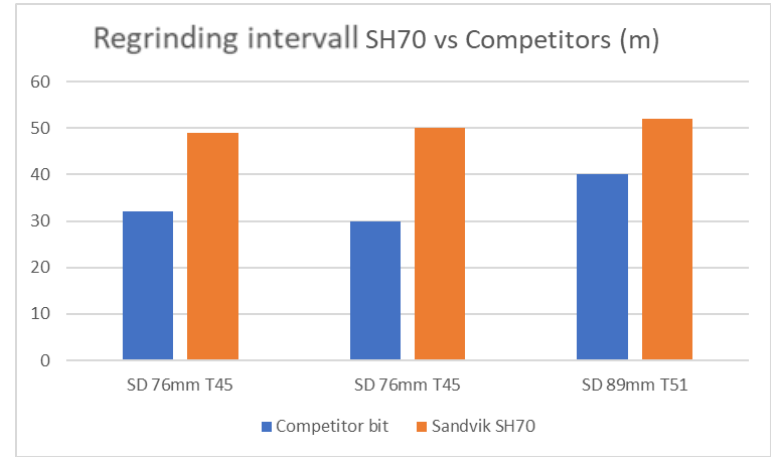
* New front design



SH70 VS COMPETITORS

SANDVIK RETRAC BITS

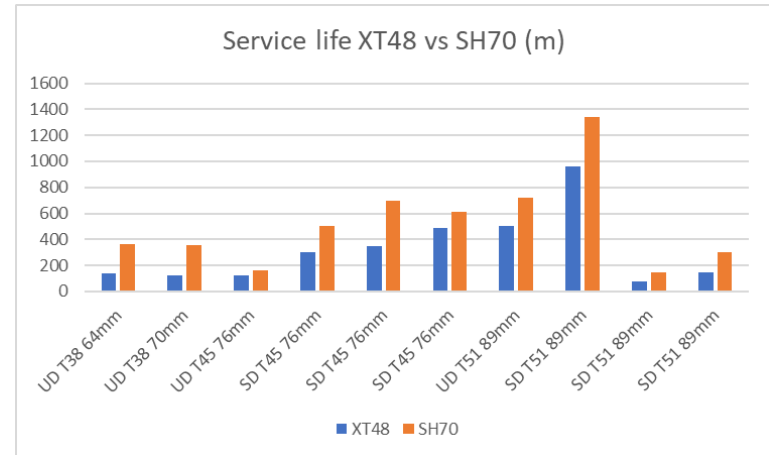
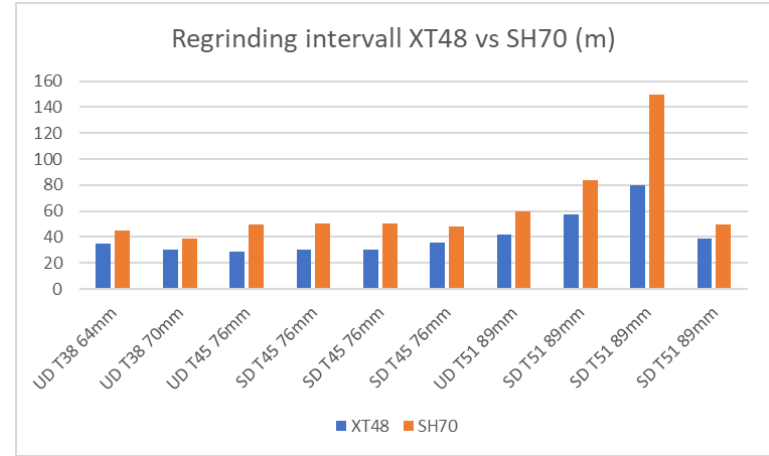
- Results from testing against customer bits
- SH70 bits in general achieved one hole more than competitor bits before regrinding
- SH70 bits had an improved service life of at least 20%



SH70 VS XT48

SANDVIK RETRAC BITS

- Results from testing at 10 different customer sites
- Significant increase in both regrinding interval and service life



RELEASE THE POWER

CT55 & CT67 – THREADS OF THE FUTURE



NEW THREADS UTILIZE THE POWER

CT55

The new T51

CT67

The new GT60



THE FEATURES

- Curved thread profile reduce stress levels in all the right places
- Shoulder drive
- Every corner of the product is optimized for fatigue strength

THE VALUES

- Productivity
- Fuel Reduction
- Very easy to couple and uncouple

TOP HAMMER SURFACE DRILLING

+RANGE RODS



UNIQUE
STEEL
GRADE



NO MORE COMPROMISES +RANGE

Friction welding enables optimization of each part of the rod

- Heat treatment, processes and material selection

Sandvik +Range rods have a unique steel grade in the threads

- More heat resistant
- Reduces rate of thread wear
- Service life increases by +30%



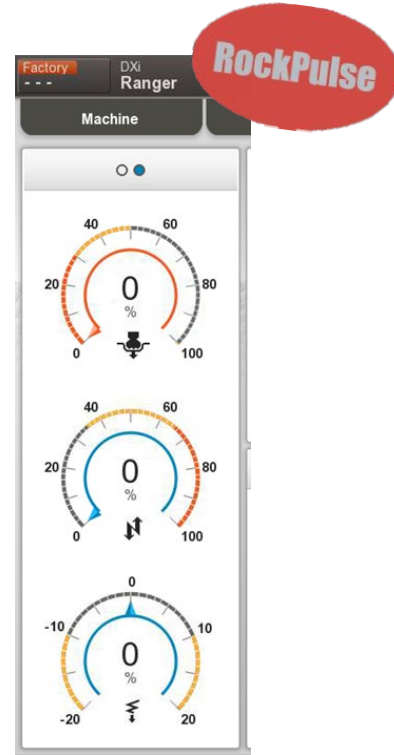
RockPulse
FEEL THE DRILLBEAT

SENSE THE IMPACT

RockPulse™ measures stress waves in real-time, analyzing the effectiveness of your drilling

Profitable rock drilling is a balance between penetration rate, hole quality and tool consumption

RockPulse™ helps you achieve optimal drilling results with lower tool consumption





RD1840C

LT90

PANTERA™ DP1600i

THANK YOU!