



M.SPACE - THE E-SERVICES PLATFORM

DIGITAL SERVICES FOR YOUR
EVERYDAY ACTIVITIES BY
PRIMETALS TECHNOLOGIES

E-SERVICES

ENABLING STEEL PRODUCERS TO OPERATE MORE EFFICIENTLY AND STAY AHEAD OF THE CURVE

E-SERVICES — NEXT LEVEL SERVICES

Digitalization is impacting the steel industry on multiple levels while also creating unparalleled opportunities for improving plant operation and maintenance. In an effort to further streamline the plant-management workflow and with the challenges of steel producers in mind we have created a whole series of digital services, called E-Services.

At Primetals Technologies we are convinced that digitalization is not only about production processes, it is essentially about people and organization. Our E-Services are human-centric and our mission is to make your work easier by connecting people and information. The philosophy behind E-Services is to offer a practical tool for each task. Each E-Service is designed to capture a specific workspace and help you increase productivity, for instance one service allows you to identify spare parts easily, another helps you organize staff training, while others enable you to predict and prevent equipment failure.



Secure, easy to access, and available whenever you need them

MULTIPLE E-SERVICES — ONE M.SPACE

The metals space — or simply m.space — is a web-based customer service platform that allows you to conveniently access all E-Services in one place. m.space is designed first and foremost to be a user-friendly environment and for this reason our E-Services are offered as Software-as-a-Service (SaaS). This means you don't have to worry about the installation of complex software, because Primetals Technologies handles all of that for you. Primetals Technologies is responsible for system hosting, administration, regular updates, and security, which keeps costs low and convenience high.



LEARN MORE
meta.is/mspace

Log on to the m.space web platform, the convenient, user-friendly portal to the full spectrum of Primetals Technologies' E-Services.

THE THREE PILLARS OF E-SERVICES ...

- Smart Machines & Digitalizing Business Processes**
 Connect people with information from machines and processes. They are geared towards making their job easier by providing relevant information and facilitating primary business processes like the procurement of spare parts.
- People-related Digitalization**
 Put people in the center of digitalization by providing access to staff services such as training and augmented reality.
- Process Integration**
 Focus on bringing together relevant business processes to form one seamless whole.

AN INNOVATIVE ONLINE PLATFORM

CONNECT TO ALL THE E-SERVICES YOU NEED VIA OUR CUSTOMER SERVICE PLATFORM M.SPACE

m.space is the innovative online platform created by Primetals Technologies to bring together a wide range of E-Services in one place. Under the m.space umbrella, steel producers can order spare parts online, make the most of the latest e-learning opportunities, and centralize document management – and the m.space platform is growing all the time.



M.BUY – DIGITAL SPARE PART CATALOG

A comprehensive online catalog of spare parts for Primetals Technologies equipment, including related product drawings and blueprints.

- Individual user rights
- Navigate through engineering drawings to identify spare parts
- Browse through catalog & request quotations



meta.is/mbuy



M.DOC – DOCUMENT-MANAGEMENT

A document-management service for storing the technical documentation of a steel plant.

- Access to plant-related information and documents such as manuals and data sheets
- Quickly navigate through a wealth of information
- Centrally organized and ready-for-use data



meta.is/mdoc



M.PREDICT – PREDICTIVE-MAINTENANCE SERVICE

Sophisticated vibration-signature analysis for the early detection of developing equipment faults.

- Allows action to be taken before damage occurs
- Combines analysis of mechanical vibration signatures with deep knowledge about equipment design



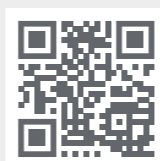
meta.is/mpredict



M.MARIO – AUGMENTED REALITY SOLUTION

An augmented reality-enhanced document-management software designed to collect, organize, and visualize operational data.

- Visualizes data such as voltages right at the machine
- Uses mobile devices, e.g. tablets or AR glasses
- All documents and data available on site for operators



meta.is/mario



M.ACADEMY – ONLINE TRAINING PLATFORM

Request in-house training at selected Primetals Technologies locations or directly on your company premises

- Virtual classroom e-learning
- Request in-house training at selected Primetals Technologies locations
- Courses can be tailored to individual requirements



meta.is/academy



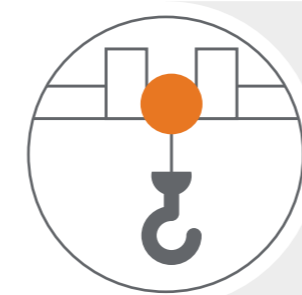
M.FLEETGUARD – CMS AND GPS TRACKING

A software-as-a-service solution that monitors technical parameters of all your vehicles in real time and gathers information of vehicles and even roads.

- Alerts if technical issues is detected or route is changed
- Preventive action before damage occurs



meta.is/fleetguard



M.CRANE – AUTOMATED ENGINEERING SERVICE

An automated, web-based engineering software that allows a customized hoisting drum to be designed in a short period of time by entering technical parameters.

- Covers every aspect of the design process
- Calculating and designing drums in a few minutes
- Save time and money



meta.is/mcrane



M.CONNECT – PROCESS DATA ANALYSIS

Designed to make sense of even the most complex plant data, gathering unorganized data, analyzing it, and transforming it into structured information.

- Turns raw data into an asset
- Combines machine data with production data to gain insights
- Paints a bigger picture for improvements



meta.is/mconnect

BENEFITS

FACILITATING YOUR DAY-TO-DAY TASKS BY CONNECTING INFORMATION AND PEOPLE

ADVANTAGES & BENEFITS

Maintenance is vital for your operations, since it can seriously impact production in terms of both scheduling and quality. A well-maintained machine not only performs better, but the risk of breakdown is also lower. By digitalizing maintenance processes, steel plant operators can plan, execute, and even predict any need for servicing of their own machines much more efficiently.

Maintenance involves several complementary tasks and processes that are time-critical and which can have a huge impact in terms of a plant's ability to increase efficiency and keep costs low. Activities such as searching for the manual, finding the right spare part, or simply documenting maintenance work can sometimes take more time than the actual job of repairing a machine. In a nutshell, E-Services help you to increase your overall productivity and therefore to reduce costs.

CYBER SECURITY

We treat your data as precious cargo, which is the reason why Primetals Technologies has built a whole set of cyber security measures into our E-Services. In fact, all our E-Services have built-in security by design. Our m.space platform, and thus all E-Services, rely on sophisticated security measures that ensure your session is fully protected and private. On top of that, we have implemented two-factor authentication just to make sure our E-Services are bulletproof.

Naturally, all our servers are protected by strong firewalls. When it comes to data exchange, our E-Services are capable of interfacing with other cloud services and can exchange information via IoT platforms. Some of our E-Services are also able to run completely on your premises, meaning within your IT environment.

DATA PROTECTION

- Encryption
- Two-factor authentication
- VPN technology
- Data exchange via platforms
- Firewalls



ARE YOU READY FOR THE NEXT LEVEL?

Find out by taking our Maintenance Digitalization Assessment

Benefit from a free basic check of your readiness for digitalization by answering a few simple questions. Get in touch with a Primetals Technologies expert to learn more about how you can unlock the potential to improve your own maintenance processes.



meta.is/MDA

REDUCE YOUR PROCESS COST

ACTUAL MAINTENANCE ACTIVITIES

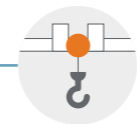


TIME FOR ASSEMBLY / DISASSEMBLY



COSTS OF PARTS & MATERIALS

COMPLEMENTARY PROCESSES



M.BUY & M.CRANE

Identify and purchase the right spare part quickly



M.MARIO & M.DOC

Find the right documents quickly and easily



M.PREDICT

Predict failure before it happens and results into unplanned shut-downs



M.CONNECT

Gain new process improvement insights



M.FLEETGUARD

Optimize logistics by vehicle monitoring and fleet management



M.ACADEMY

Train your employees

Primetals Technologies Austria GmbH

A joint venture of Mitsubishi Heavy Industries and partners

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