

Software and Processes for EOS Polymer Systems

EOS Plans

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EOS offers a complete solution for additive manufacturing: industrial 3D printers equipped with industry-leading technologies, proven processes, consulting services and software solutions to prepare, optimize, control and monitor the various aspects of the additive manufacturing process.

With a subscription-based license model, EOS Plans offer a flat rate of validated and ready-to-use processes for firsttime-right exposure with advanced capabilities to optimize the EOS Material Sets for application specific needs. Take control of your machine park, offering deep insight into machine-generated data for improved machine utilization.

Per Site			
reisite			

EOS Build Basic (Polymer)

- included in system -

Process management including ready to use **EOS Materials Sets**

- EOSPRINT (1 seat)
- all EOS Material Sets available for the respective system
- **Process Settings**

EOS Build Polymer Plan

- optional available as subscription license -

Customize open, validated EOS Material Sets to fit your application needs - adjust parameters and optimize processes for the best part results.

- EOSPRINT (10 seats)
- all EOS Material Sets
- **Process Settings**
- Parameter Editing and Customization
- Validated Start Values of EOS Material Sets
- **EOS Hub**
- Online Training: Process Science & **Engineering for Polymer AM**
- **EOS Cost & Carbon Calculator**
- Upgrades of Software and Processes

Why an annual plan or subscription?

Flat rate of EOS material sets with predictable costs ———————————————————————————————————
EOS Plans provide customers with flexible access to all available EOS material sets, without the need to commit and
stick to a single material. This material sets flat rate empowers customers to quickly adapt to changing market
requirements, without incurring additional investments.
EOS Build Basic contains all available Material Sets for the respective system and enables customers to produce parts
with the validated EOS Material Sets.
Flexibility is the key
The EOS Plans' pay-per-usage model offers exceptional flexibility in tailoring software usage to match your production
requirements on a yearly base. This results in a cost-efficient, adaptable, and predictable method of accessing precisely what you need.
Pay per usage
EOS Build requires only a one-year commitment to access its various advantages. Customers can renew or cancel the
plan annually, especially if they transition to production without the need to customize new Material Sets. The ability to
print frozen jobs remains available with the EOS Build Basic. Customers can resume the full capabilities of the EOS Build plan at any time.
Shift costs from CAPEX to OPEX —
The subscription model of EOS Plans frees customers from the rigidity of a "perpetual," prepaid-license purchase
structure requiring a high upfront investment. Users pay a fixed subscription fee, which allows easier budgeting due to
its predictability. It also shifts this cost from a capital expense (CAPEX) to an operating expense (OPEX), which make the budget planning much easier.
Latest innovations and training included ———————————————————————————————————
Meanwhile, regular updates to the software keep its functionality at the leading edge and facilitate AM innovation.
Additionally, the included training resources ensure that engineers can always build — or expand — their AM knowledge.

EOS Build

EOS Build delivers the key features of the data preparation and job optimization software EOSPRINT. Multiple users can optimize process parameters and manage material usage across the organization. The plans provide customers with flexible flat rate access to all available validated and proven EOS Material Sets.

EOS Hub comes with EOS Build and shows the machine data (machine state) and machine utilization (performance) remotely in a web application.

The Cost per Part and Carbon Calculator is a comprehensive cloud-based tool that calculates costs per part of the production and carbon emissions based on customer-specific input.

EOS Build is licensed per site, which means you purchase it once for the entire machine park.

Key features of EOS Build Polymer Plan

10 licenses of EOSPRINT (per site)

Regular software updates with innovative features and regular process updates

Parameter editing capabilities enable customers to optimize for higher part quality and increased productivity. (e.g., laser power, scan speed, hatch distance)

Validated, high-quality EOS Material Sets for the EOS P3 NEXT and EOS P 500 (July 2025)

Material set management to track and manage material sets across your organization

Advanced previewing and visualization capabilities

Access to training: "Process Science & Engineering for Polymer AM" (for up to 4 users)

Access to the cloud-based dashboard EOS Hub including Machine State and App Machine Performance App

EOS Cost & Carbon Calculator

EOSPRINT Software Development Kit (SDK) for automation purposes

EOS Hub is part of EOS Build

EOS Hub offers insights into machine performance, either individually or as a whole park of devices. As a web-based subscription platform, it's available via the cloud, with a UI for desktop and mobile devices.

- EOS Hub the big-picture view platform: Through its open API, other software types (MES, CAQ, ERP, IIoT) can easily integrate with EOS machine data via a single interface.
- Machine State App: With a comprehensive dashboard, the app provides real-time insights on the status of your machines, including all system messages, graphs of the sensor data for quick error analysis. The App offers remote control capabilities, allowing you to stop or pause a build job from anywhere using your mobile
- Machine Performance App is focused on monitoring the utilization and uptime of machines. The App allows users to make data-driven decisions that can drive operational efficiencies and strengthen overall performance.

EOS Cost & Carbon Calculator

Gain full transparency and control over your application costs and environmental impact with our Cost & Carbon Analytics Tool. This intuitive solution provides a customizable breakdown of costs per part, covering every aspect from system usage and services to materials, post-processing, overheads, and consumables.

Key features of EOS Cost & Carbon Calculator
Cost & carbon scenario analysis
Visual analytics
Cost & carbon scenario analysis
Cost sensitivity analysis
Report generation
Data-driven design to match cost & carbon targets
Customized cases for customer pricing

EOS Software Plans

Comparison sheets



	EOS Build Basic (Polymer)	EOS Build Polymer Plan
EOS Material Sets	all for EOS P3 NEXT and EOS P500	all for EOS P3 NEXT and EOS P500
Validated and open Start Values of EOS Material Sets	Х	✓
Material Set Upgrades	Х	✓
Software Upgrades	Х	✓
EOSPRINT Users	1	10
Online Trainings	х	Process Science & Engineering for Polymer AM (for up to 4 users)
Access to EOS Hub Machines State App	X	√
Access to EOS Hub Performance State App	X	√
Cost per Part and Carbon Calculator	X	√

EOSPRINT

	EOS Build Basic (Polymer)	EOS Build Polymer Plan	
General			
Automatic Assignment of Exposure Sets	✓	✓	
EOS Soft Dongle (on request)	✓	✓	
Export/Import of Machine Connections (Configurations)	✓	✓	
Export SLI-files	✓	✓	
Support of 3MF file format (import)	✓	✓	
Support of 3MF Volumetric Extension version 1.0	✓	✓	
Job file Recovery	✓	✓	
Load nTop Implicit Files from nTop Plugin for EOSPRINT	✓	✓	
Build Job Flag for accurate OEE measurement	✓	✓	
Upwards (and downwards) compatibility with EOSYSTEM	✓	✓	
Collision Detection	✓	✓	
Generate Test Series - Design of Experiments (DoE)	✓	✓	
Part Specific Hatching	✓	✓	
Shrinkage and Beam Compensation	✓	✓	
Automatic Assignment of Exposure Sets	✓	✓	
Fine Tuning			
RECOATING Min/Max Charge	✓	✓	
Process Chamber Temperature	✓	✓	
Removal Chamber Temperature	✓	✓	
Security			
Password Protection for fine tuning on machine	✓	✓	
Lock individual Material Sets	✓	✓	
Encrypted build files (task)	✓	✓	
Parameter Editor			
Change of Exposure Types	X	✓	

Energy Input: Laser Power, Scan Speed, Hatch Distance for all	Х	✓
Exposure Types		
Hatch Option e.g. Hatch Rotation angle, Hatch offset,	X	✓
Skin Core Exposure	X	√
Layer Skipping in Core (Skin/Core)	Х	✓
Change Layer thickness	Х	✓ with 11.25
Time Optimized Support & Contour (reduced jumps)	X	✓
Contour Corridor	Χ	✓
Change Edge Definition (Edge Offset, Edge Factor, Threshold, Min Radius Factor)	х	✓
Control Skywriting, Double exposure	Х	\checkmark
Z-Segmentation	✓	✓
Volume Segmentation	✓	✓
Preview Features		
Scan Path Preview (Exposure Order and Types, Jumps,)	✓	✓
Preview of Jumps	Х	✓
Visualization of Laser Utilization (multi laser machines)	X	✓
Visualization of Exposure Time per Layer	Х	✓
Animated Scan Path Preview	Х	✓
Laser Power and Scan Speed Visualization in Scan Paths	Х	✓
Others		
Mesh Error Detection & Visualization	✓	✓
Build File Integrity Check	✓	✓
EOSPRINT Server (BETA)	Х	✓
EOSPRINT SDK for automation purposes	Х	✓ (EDN optional)
Material Set Cloud (synchronize & share material sets)	X	✓

EOS Material Sets

EOS system	EOS Material Set	Open Start Values with EOS Build Polymer Plan	date
EOS P3 NEXT	PA2200_120_P397_M11_001	✓	December 2024
EOS P3 NEXT	PA2201_120_P397_M11_000	✓	January 2025
EOS P3 NEXT	PA2220_120_P397_M11_xxx	✓	planned March 2025
EOS P3 NEXT	PA950HD_120_P397_M11_xxx	✓	planned March 2025
EOS P3 NEXT	PA1101_120_P397_Mx1_xxx	✓	planned May 2025
EOS P3 NEXT	PA2201GB_120_P397_M11_xxx	✓	planned July 2025
EOS P 500	PA2200_120_P501_A23_xxx	✓	planned June 2025

EOS Hub

	EOS Build Basic (Polymer)	EOS Build Polymer Plan	
EOS Hub – Platform features			
Open API for EOS Hub	Х	✓	
User permission management	X	✓	
Machine specific permission management	X	✓	
Get notifications in the app or as email	X	✓	
Language selection, German, English	Х	✓	
EOS Hub - Machine State			
Overview of multiple systems: M 290, M 300-4, M 400-4, P 396, P 500, P 770, P3 NEXT are supported	х	✓	
Display machine information (type, SI number, loaded material)	х	✓	
Display current job status with remaining build time	Х	✓	
Remote control machines (pause, stop, resume jobs)	X	✓	
Display user messages (search and filter)	Х	✓	
Get notified on certain user messages	Х	✓	
Display last jobs built on the machine (search and filter)	Х	✓	
Define limits for sensor values	Х	✓	
Display measured and calculated data in real time as a list or as graphs	х	✓	
Get notified when a measured or calculated value exceeds limits	х	✓	
Layer Information (including PowderBed images)	Х	✓	
EOS Hub - Machine Performance			
Overview of multiple systems	Х	✓	
Details on the utilization of a single machine and a machine park	х	✓	
Display availability of a single machine and a machine park	Х	✓	
Change the time span to measure	Х	✓	
Manually edit the machine states	Х	✓	

EOS Cost & Carbon Calculator

EOS system	EOS Build Basic (Polymer)	EOS Build Polymer Plan
cost estimation	X	✓
cost simulation	Х	✓
consulting support	X	✓
carbon emissions estimation	X	✓
cost scenario analysis	X	✓
cost sensitivity analysis	X	✓
report generation	X	√



	EOS P3 NEXT	EOS P 500	EOS P 396 EOS P 770	
Print Domain Machine License				
Ability to share process parameters within the machine park	✓	✓	Х	
EOSTATE Quality Reports				
Job quality & part quality report as PDF	✓	✓	✓	
Automated export of reports (via EOSCONNECT Core)	✓	✓	✓	
User & role Management	✓	✓	✓	
Language Selection (English, German)	✓	✓	✓	
EOSCONNECT Core				
Access to machine data via OPC UA	✓	✓	✓	
Access to machine data via MQTT	✓	✓	✓	
Access to machine data via Web API	✓	✓	✓	
EOSCONNECT Core Control				
Control a job via OPC UA (Start/Stop/Pause)	√ (stop & pause)	√ (stop & pause)	Х	
Load and unload an exchange frame to the transfer station	X	✓	Х	