



Солфинс Скопје  
с е м и н а р з а

# 3D ТЕХНОЛОГИИ

во развој и производство

Холидеј Ин Скопје | 3.11. 2022. | 9-16h | Милениум 2



[ПОГЛЕДАЈТЕ VIDEO са SEMINARA](#)



radimo  
od  
**2004.**  
godine

imamo  
preko  
**500**  
klijenata

prisutni smo  
u  
**4**  
države

imamo  
preko  
**30**  
zaposlenih

imamo  
kancelarije u  
**4**  
grada

stigli smo u  
Makedoniju  
**2022.**  
godine



**SOLFINS**  
**3D KOMPANIJA**  
O nama >

# SOLFINS 3D KOMPANIJA

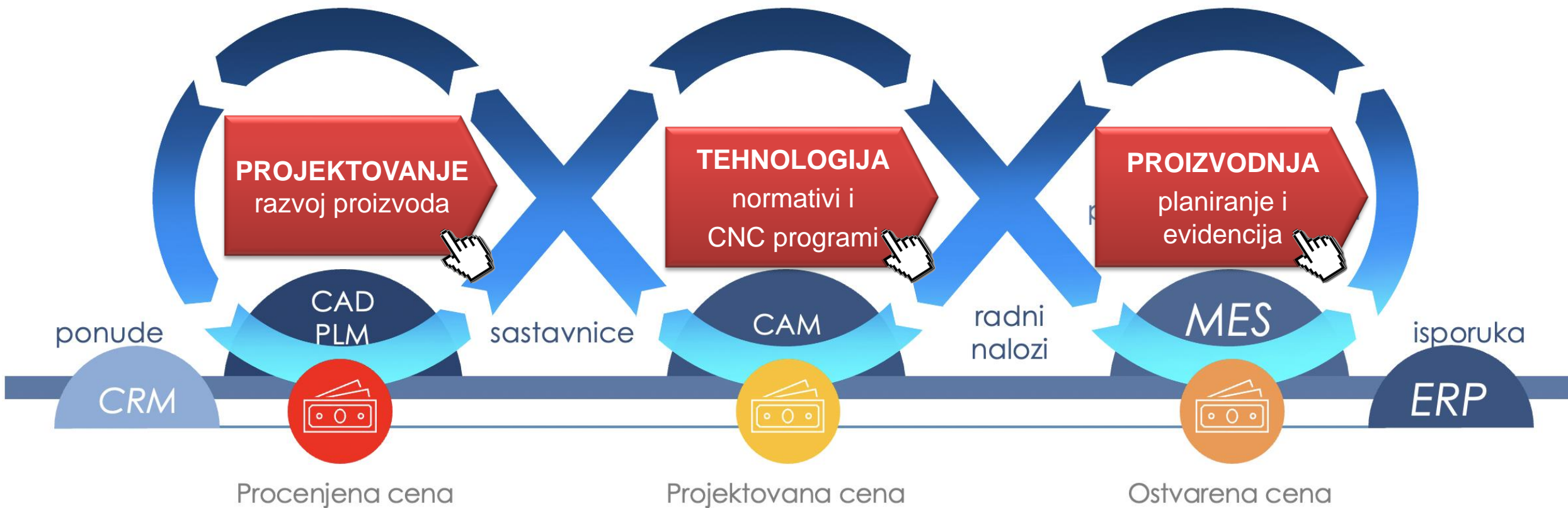


**3DEXPERIENCE®**

Poslovna platforma

**3S DELMIAWORKS**

Proizvodni ERP i MES



## SOLFINS 3D AKADEMIJA obuke i sertifikati



[SolidWorks >](#)

[SolidCAM >](#)

[CATIA >](#)

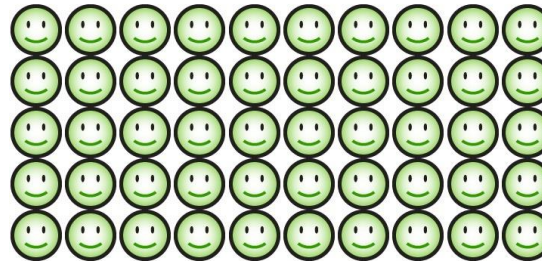
[3DEXPERIENCE >](#)

[3D štampa >](#)

[3D skeniranje >](#)

## SOLFINS TEHNIČKA PODRŠKA

Latest Feedbacks

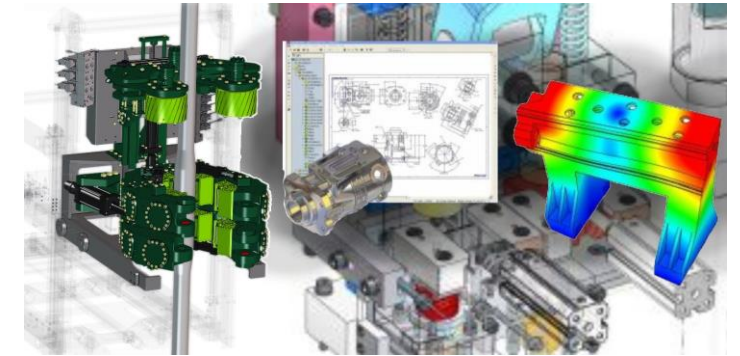


Svi Solfins klijenti imaju na raspolaganju najveći tim za tehničku podršku koji je uvek dostupan:

- telefon
- mejl
- TeamViewer
- + Hitna podrška
- + Podrška kod klijenata!

**SOLFINS PODRŠKA  
UVEK DOSTUPNA NA  
JEDAN „KLIK“**

## OSTALE SOLFINS USLUGE



[Mašinsko projektovanje >](#)

[Simulacije i proračuni >](#)

[Usluga 3D štampe >](#)

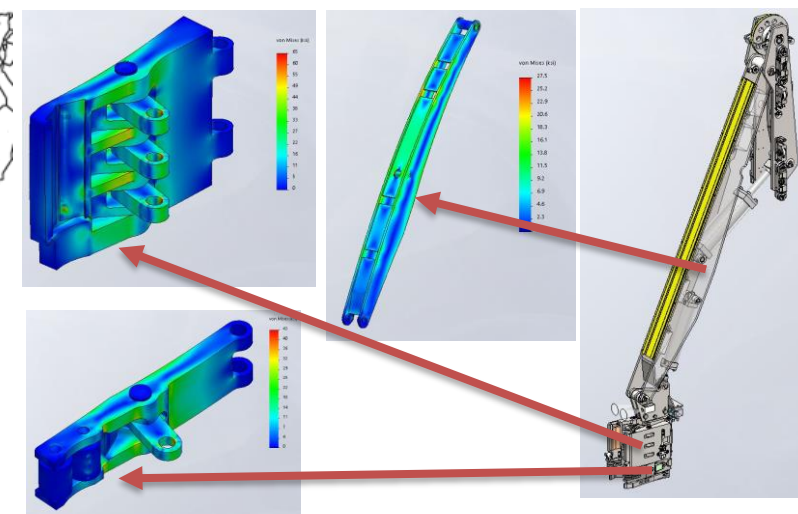
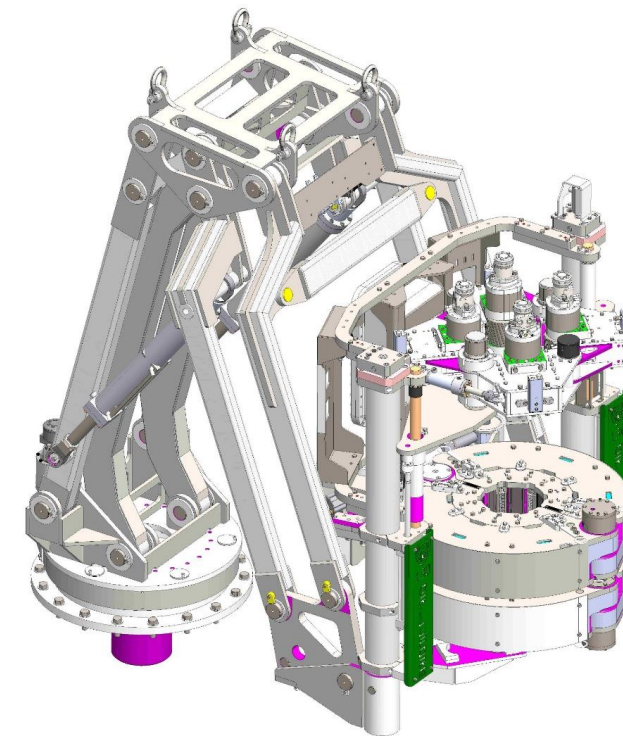
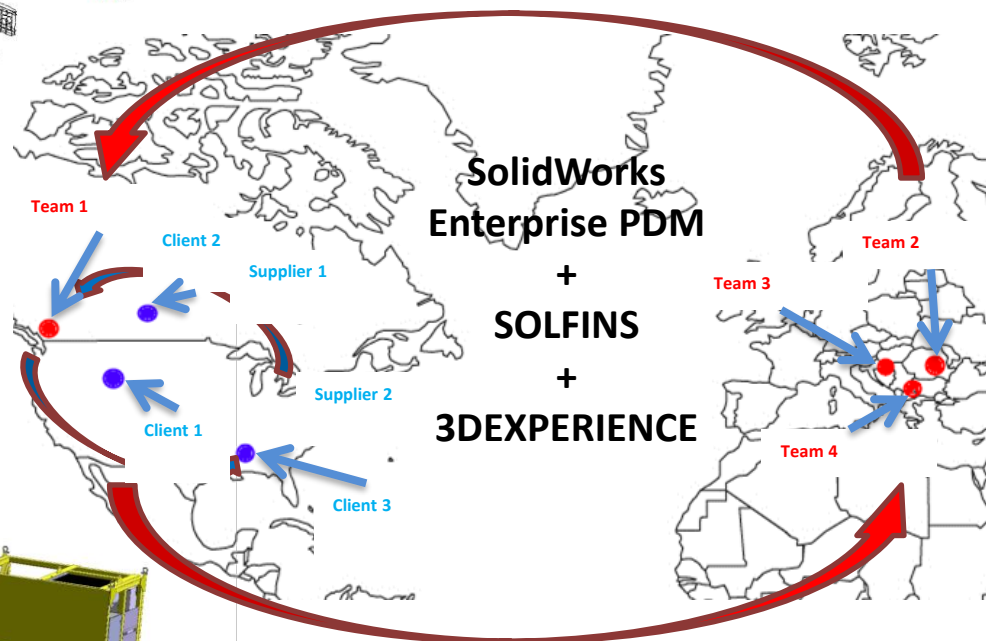
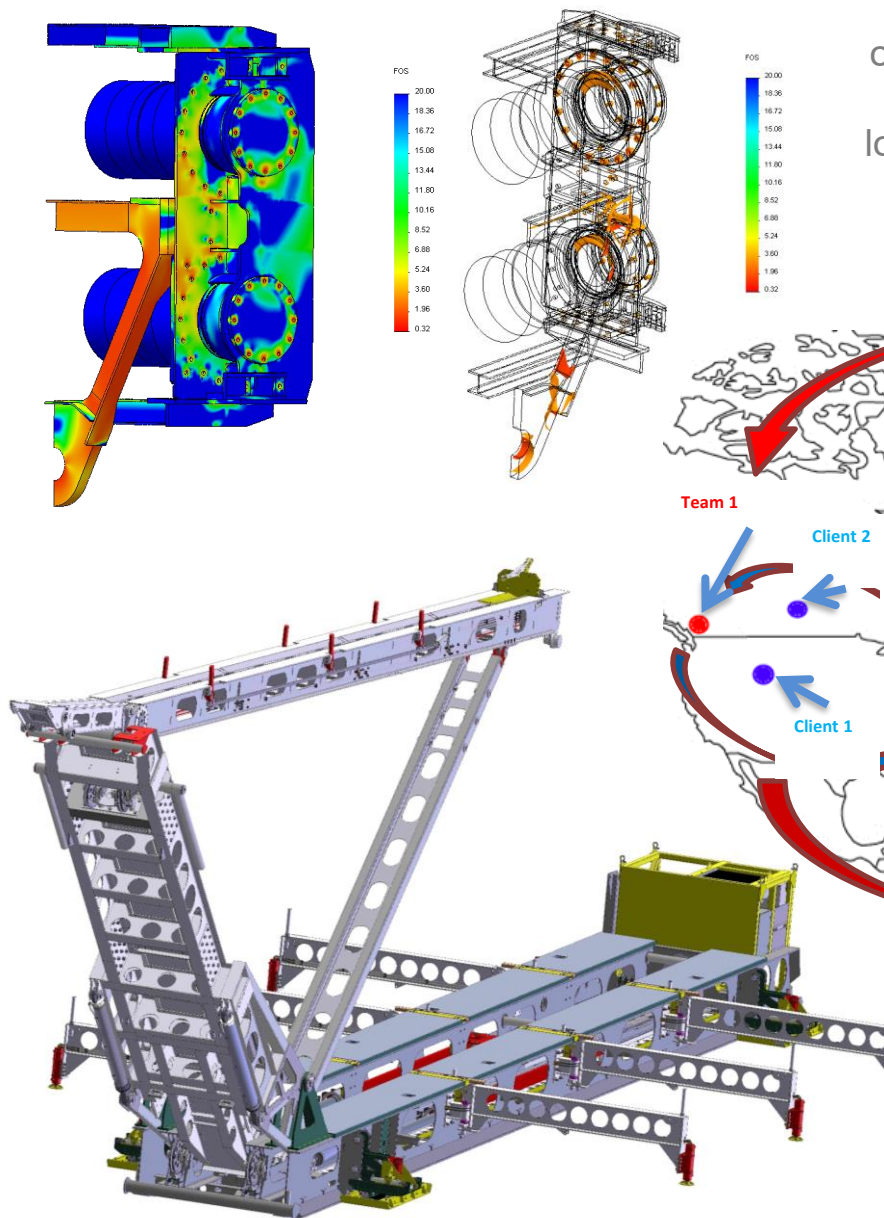
[Usluga 3D skeniranja >](#)

[Reverzni inženjering >](#)

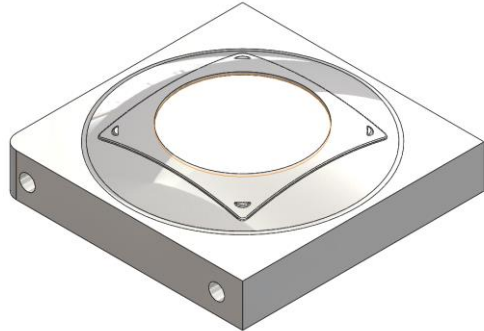
[Konsalting >](#)

[Implementacije >](#)

Razumemo vaše potrebe, probleme i optimalna rešenja za razvoj proizvoda, saradnju timova na različitim lokacijama, jer i sami radimo na sličnim projektima već dve decenije!



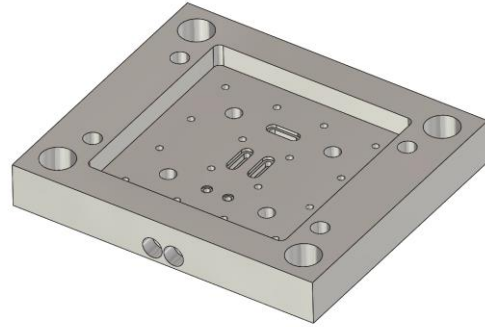
### Primer: Aling



Klijentovo vreme grube obrade: 90min  
 Tri rezna alata  $\varnothing 22, \varnothing 6, \varnothing 3$   
 Željena visina neravnina:  $Ra=0,3mm$   
 Materijal forme: 1.2767 (830 N/mm<sup>2</sup>)

#### SOLFINS VREME:

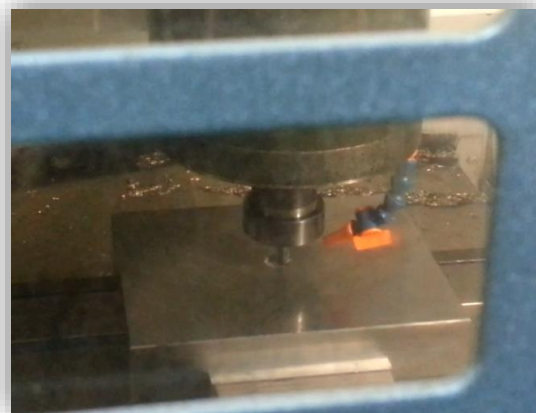
Programiranje i generisanje koda – 2min  
 iMachining vreme grube obrade: 20min  
 Jedan alat –  $\varnothing 10 \times 22mm$



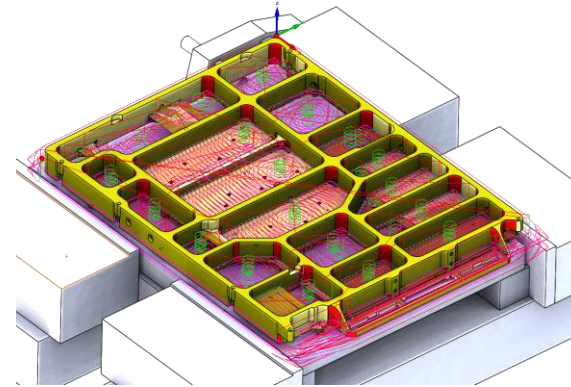
Klijentovo vreme grube obrade džepa: 45min  
 Dva tipa alata sa pločicama (AJX, APX)  
 Materijal forme: 1.1730 (640 N/mm<sup>2</sup>)

#### SOLFINS VREME:

Programiranje i generisanje koda – 2min  
 iMachining vreme grube obrade: 6min  
 Jedan alat –  $\varnothing 10 \times 22mm$



### Primer: Mars



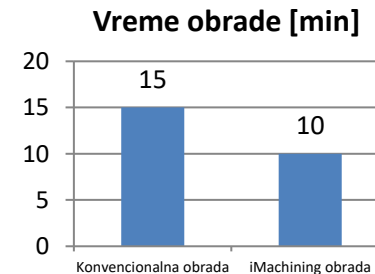
Materijal: Al 6082-T6  
 Mašina: Mazak FH4800 – Mazatrol 640M



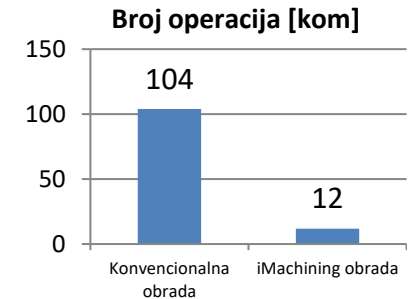
Rezni alat:  $\varnothing 10 mm$  / 3 rezne ivice  
 Dubina obrade: 18 mm

**Godišnja ušteda 16.000 EUR**

#### iMACHINING EFEKTI U ODNOSU NA POSTOJEĆI TEHNOLOŠKI POSTUPAK:



**Ušteda  
33 %**



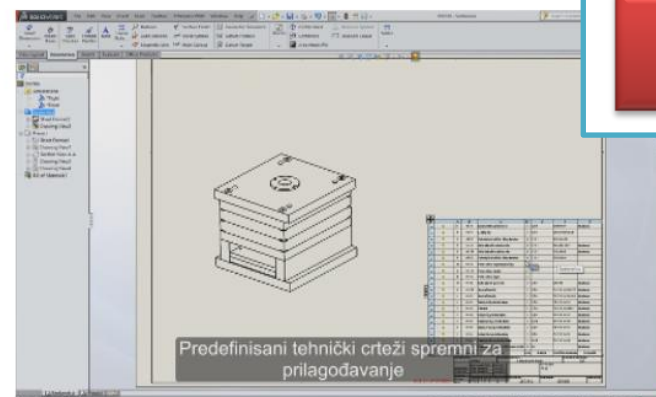
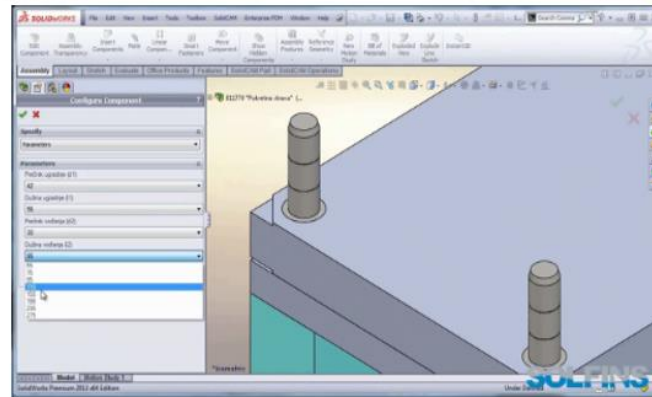
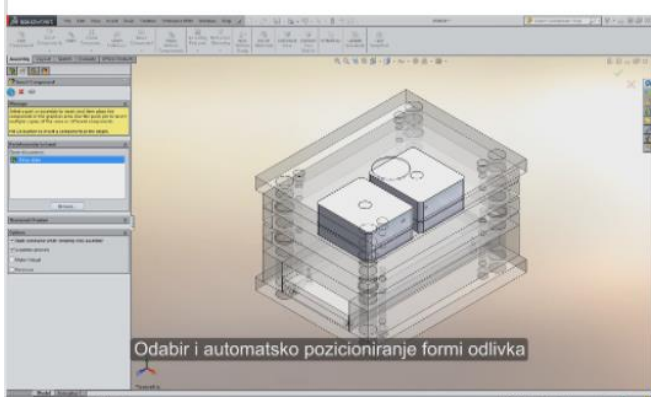
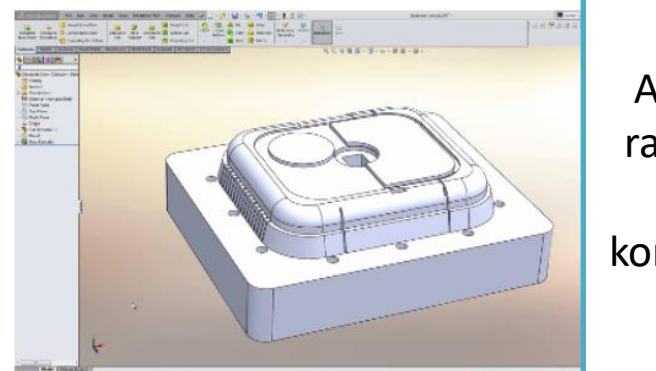
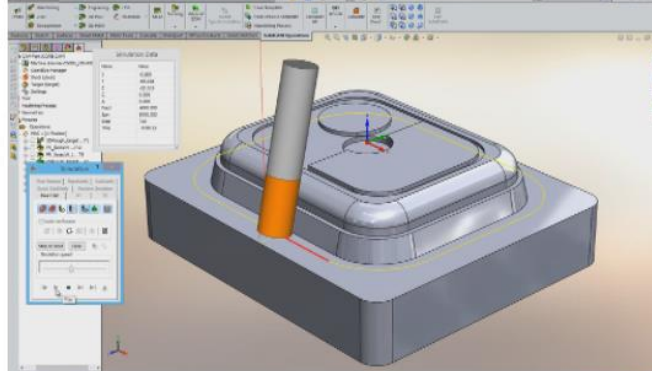
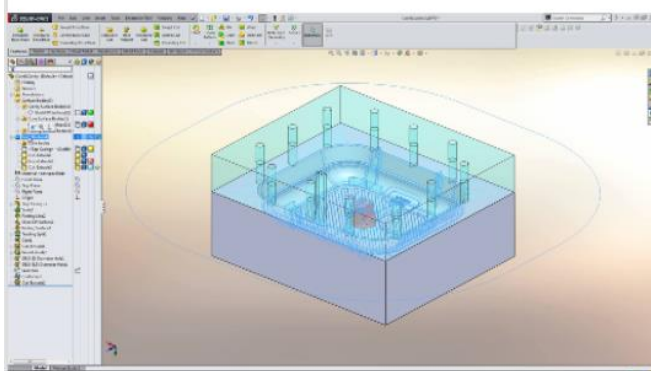
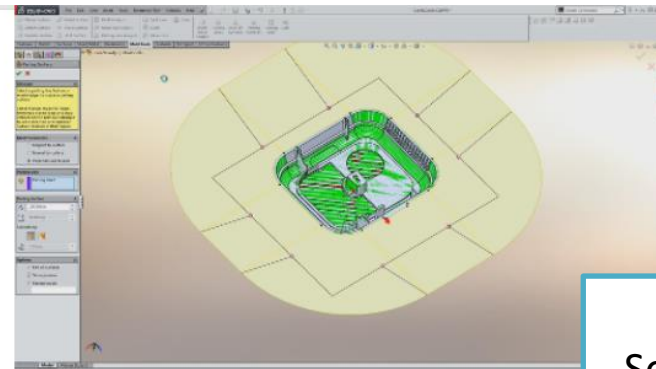
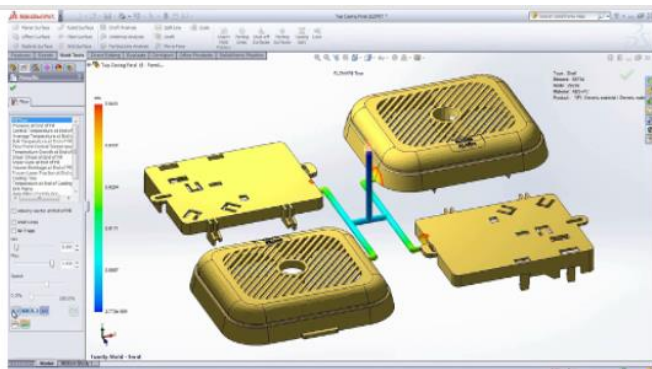
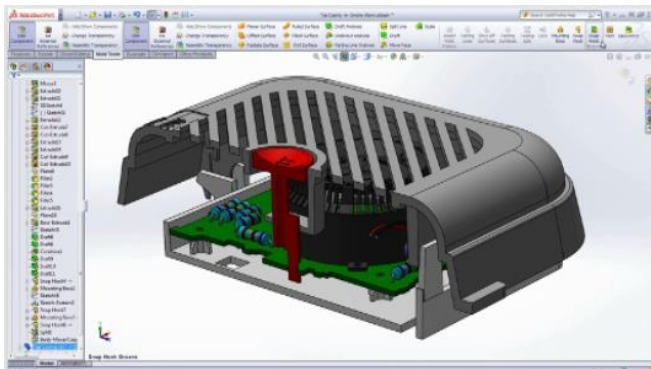
**Ušteda  
9 puta**

# Sve za projektovanje i proizvodnju alata

(3D CAD, simulacije brizganja i CNC obrade, CAM programiranje, tehnički crteži)

ALATI ZA BRIZGANJE PLASTIKE

SOLFINS

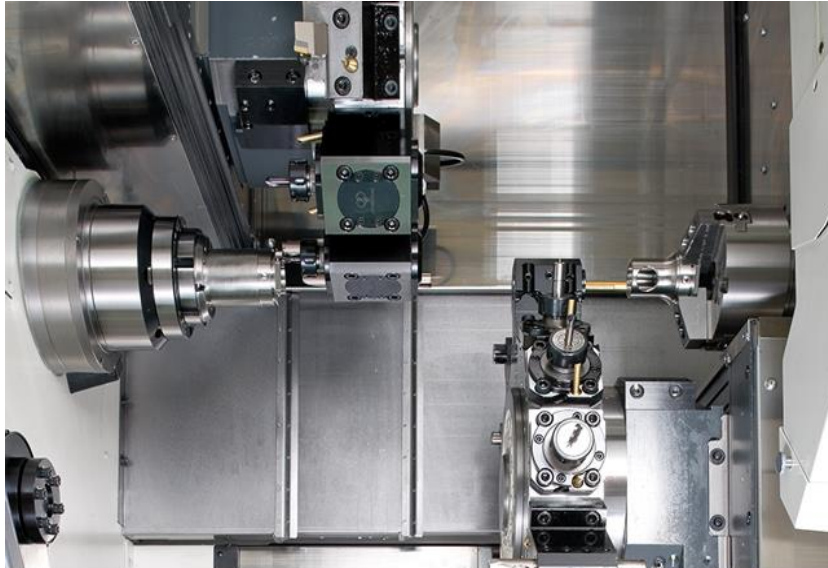


SolidWorks PDM je omogućio Alingu paralelni rad konstruktora proizvoda, konstruktora alata i tehnologa

Rešenja za upravljanje



### Primer: MARS



### Primer: UNIMET



## Solfins POSTPROCESORI

TORNOS



CITIZEN  
CINCOM



INDEX  
TRAUB



SELICA



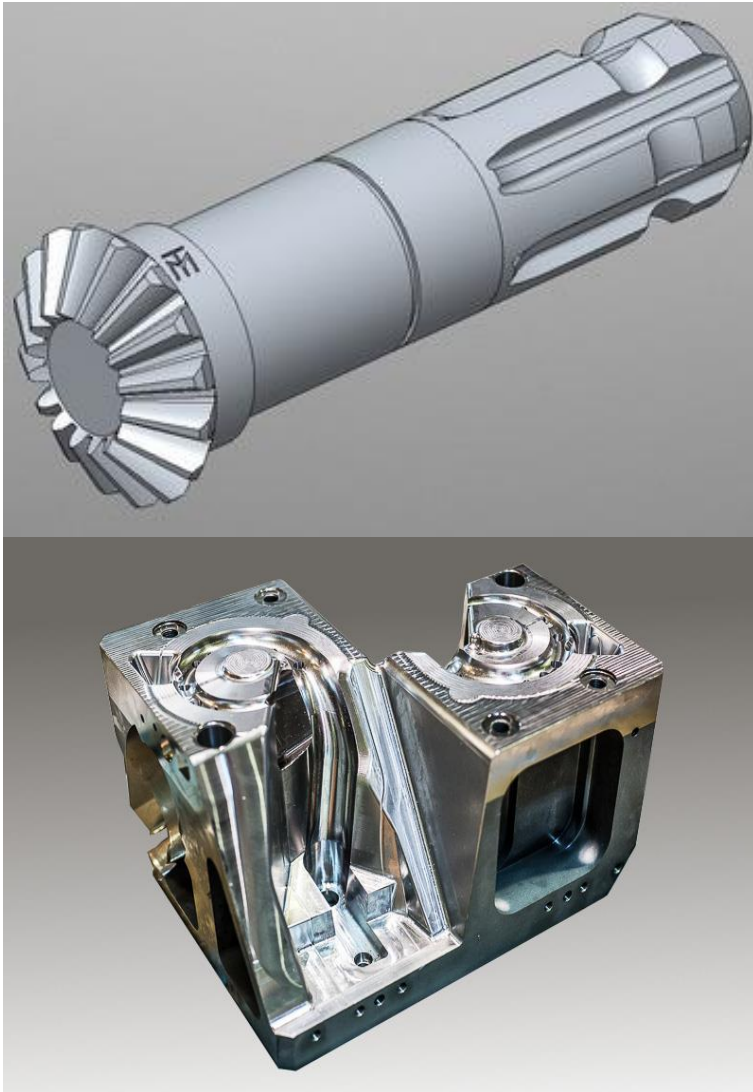
MISHIMA



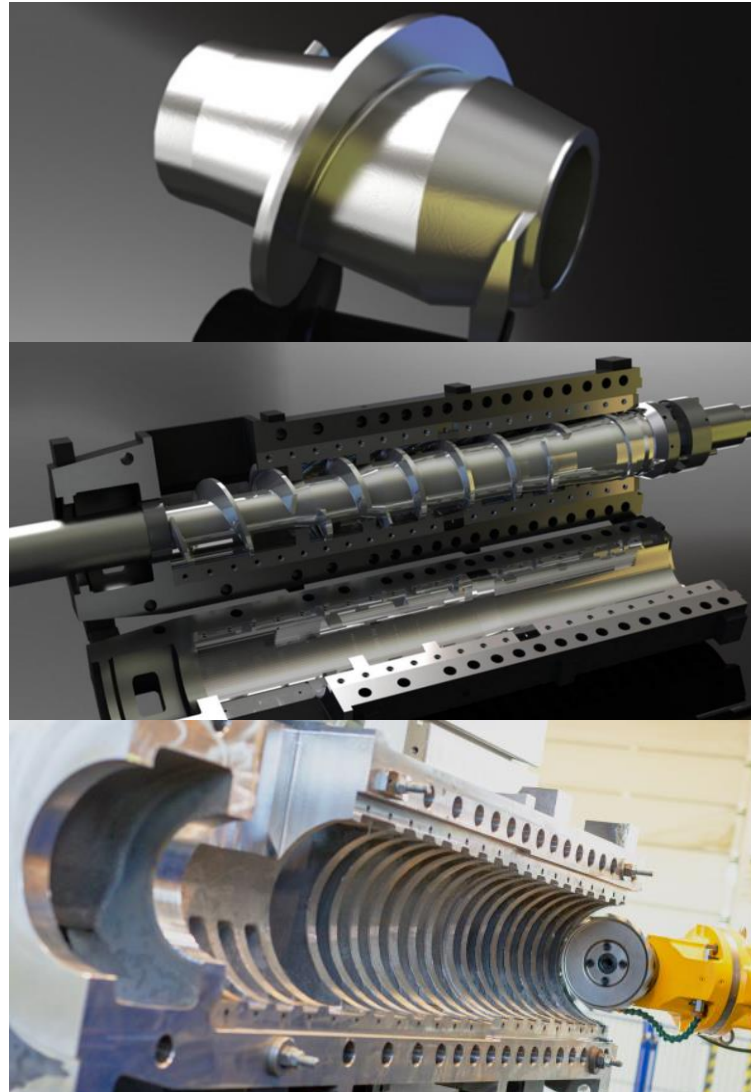
## PRIMERI CNC MAŠINA



### Primer: Termometal

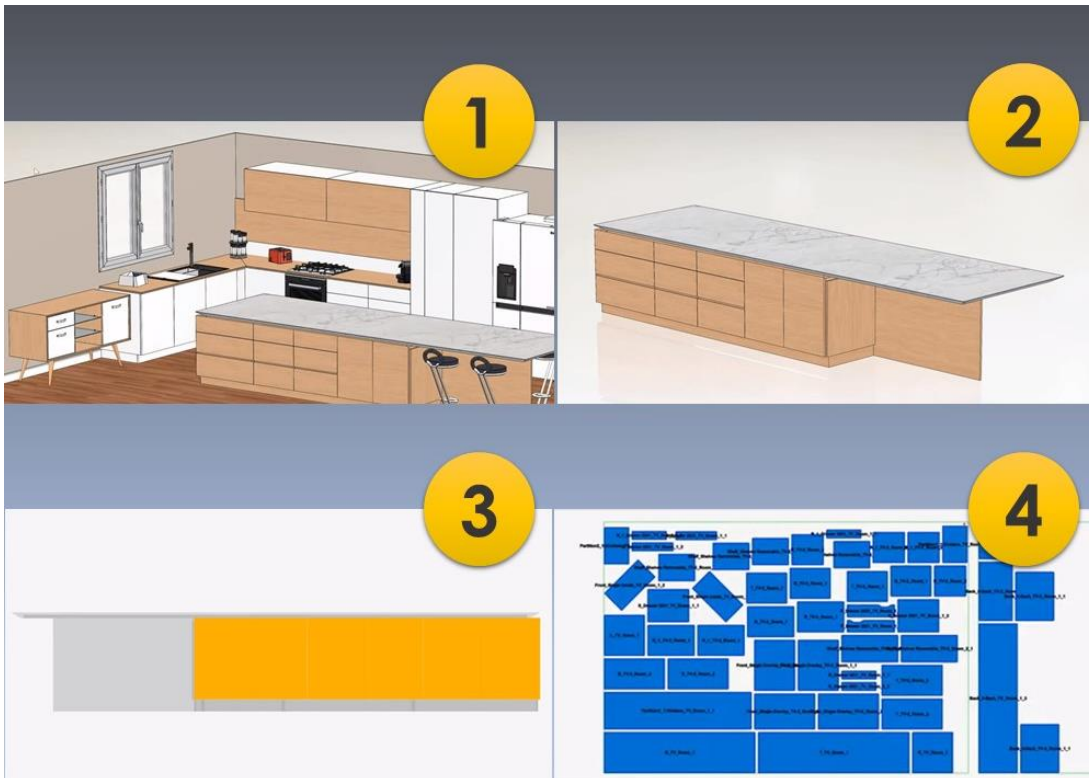


### Primer: T1 Ada

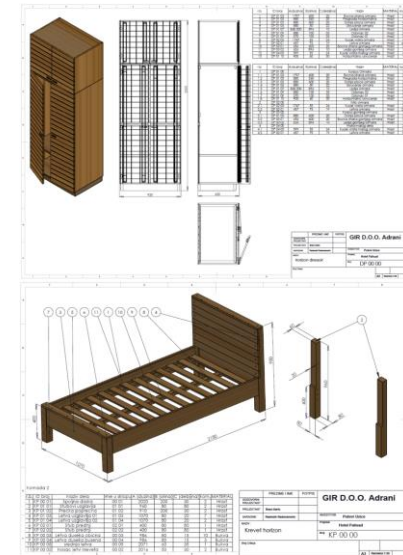
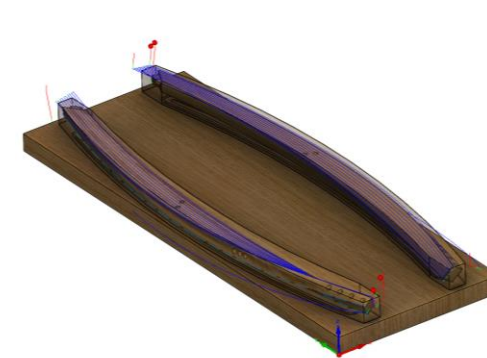


## SWOOD Rešenja

parametarsko projektovanje nameštaja i enterijera kroz SolidWorks 3D CAD  
 programiranje svih tipova CNC mašina za obradu drveta  
 Nesting modul za krojne liste automatsko obeležavanje  
 postprocesori za sve tipove CNC mašina za obradu drveta



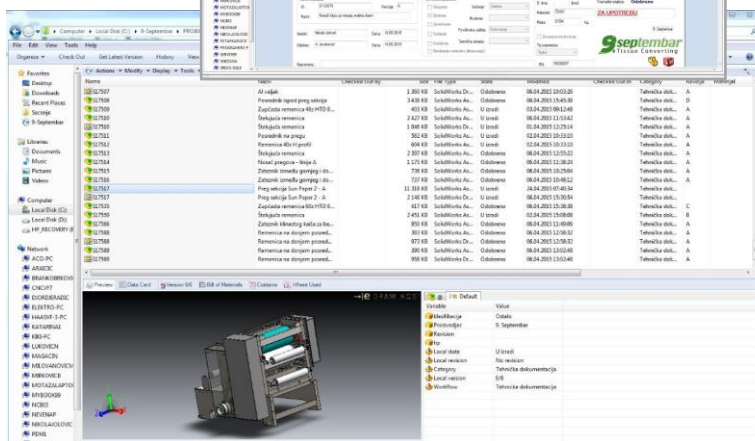
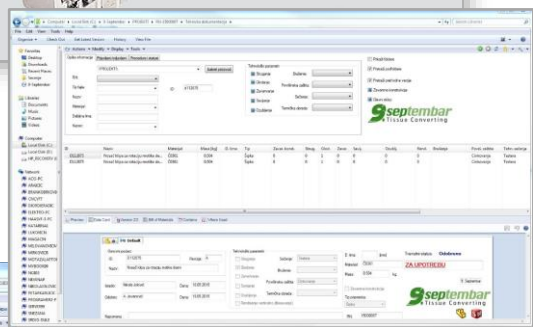
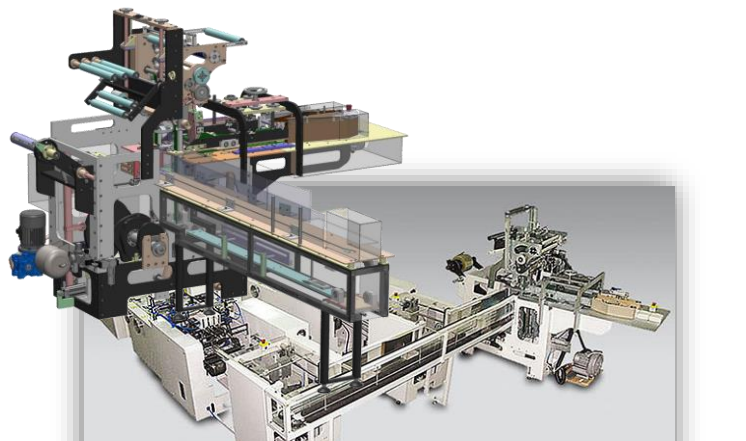
## Primer: GIR



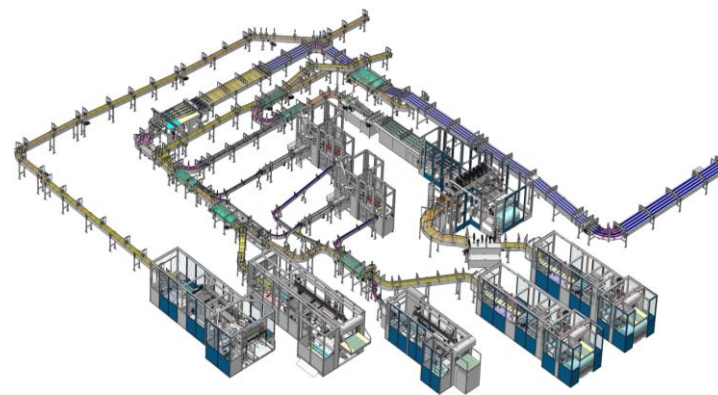
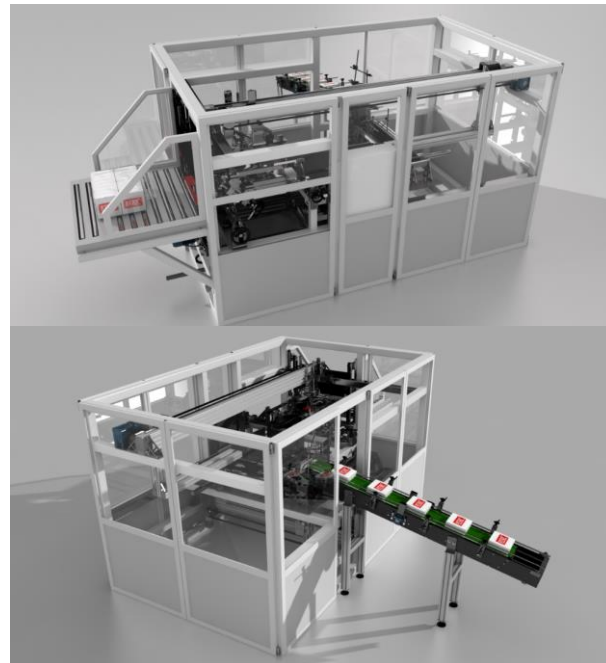
## Primer: Enterijer Janković



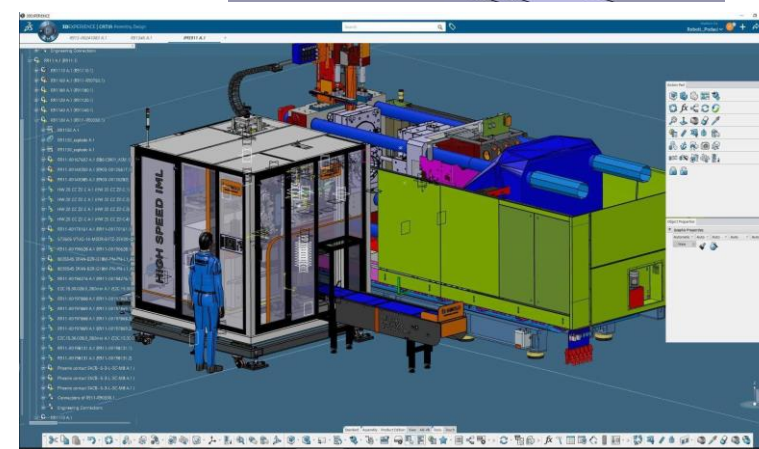
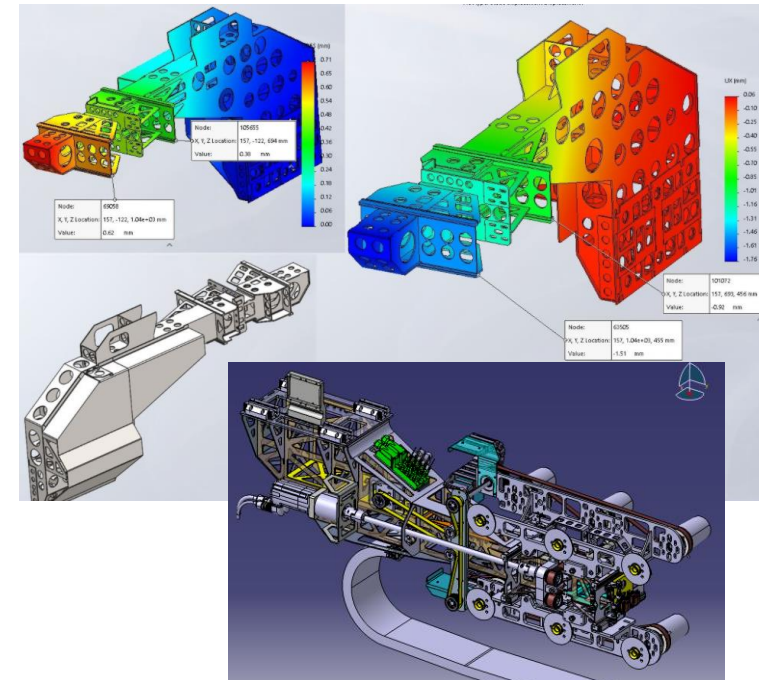
## 9. septembar



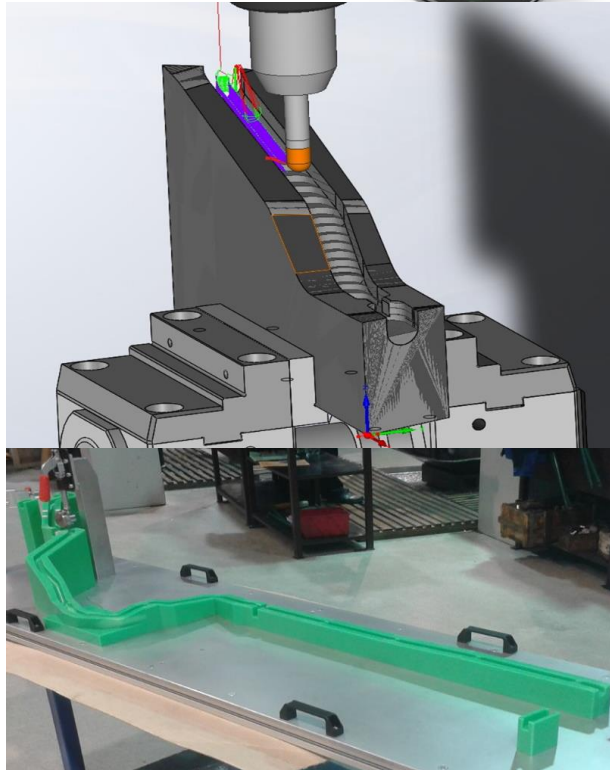
## Stax



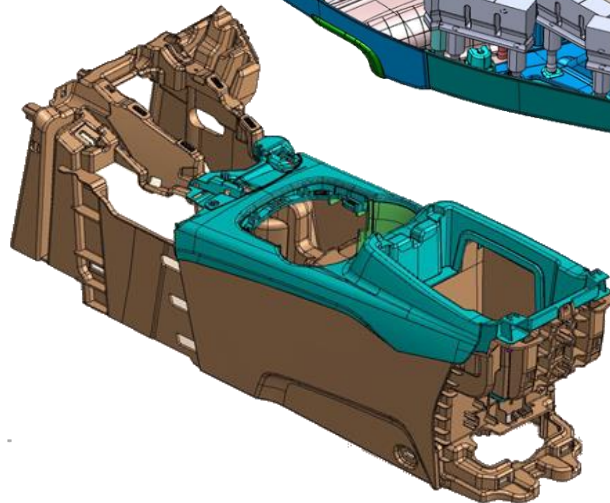
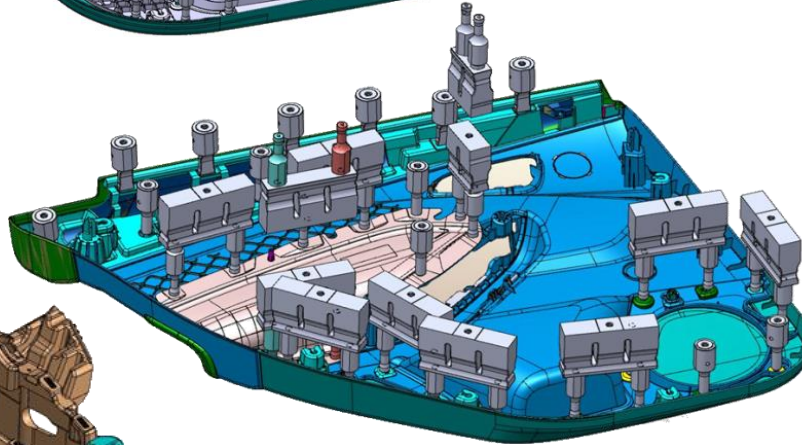
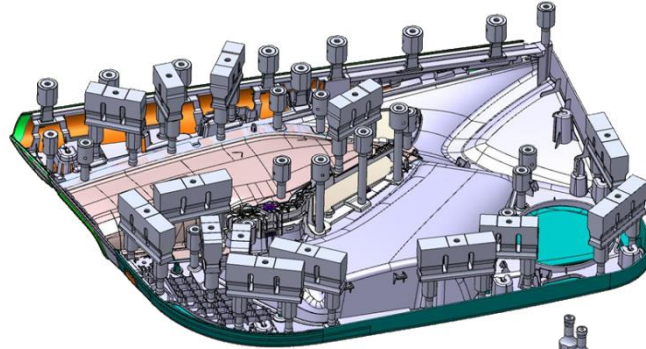
## Inmold



## Termometal



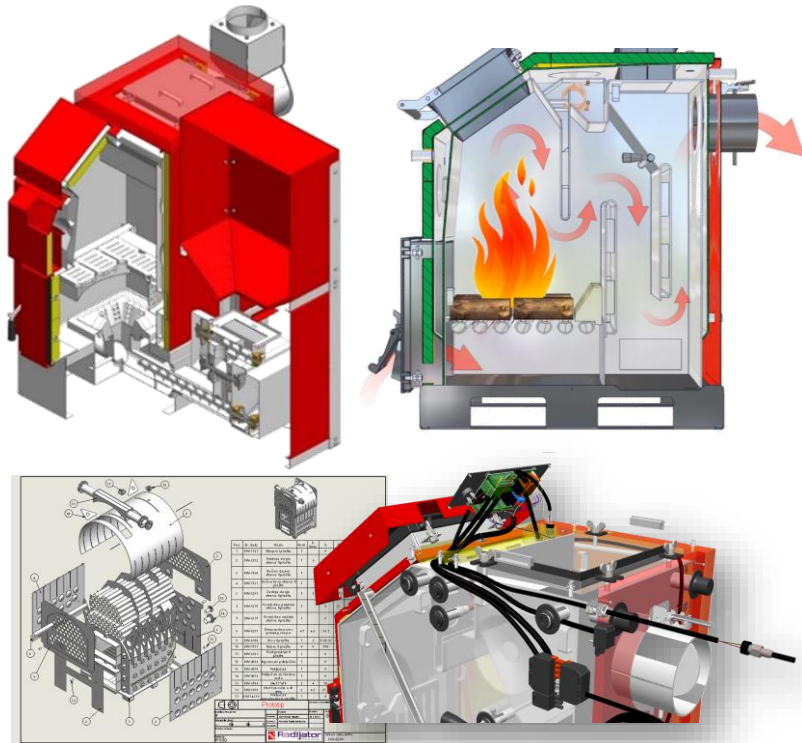
## Telsonic



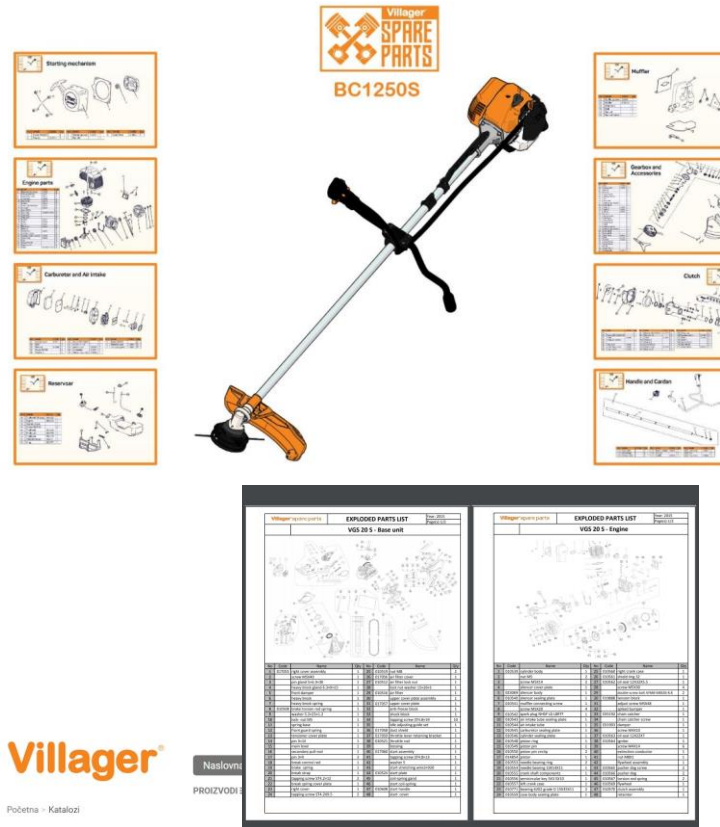
## Ostalo



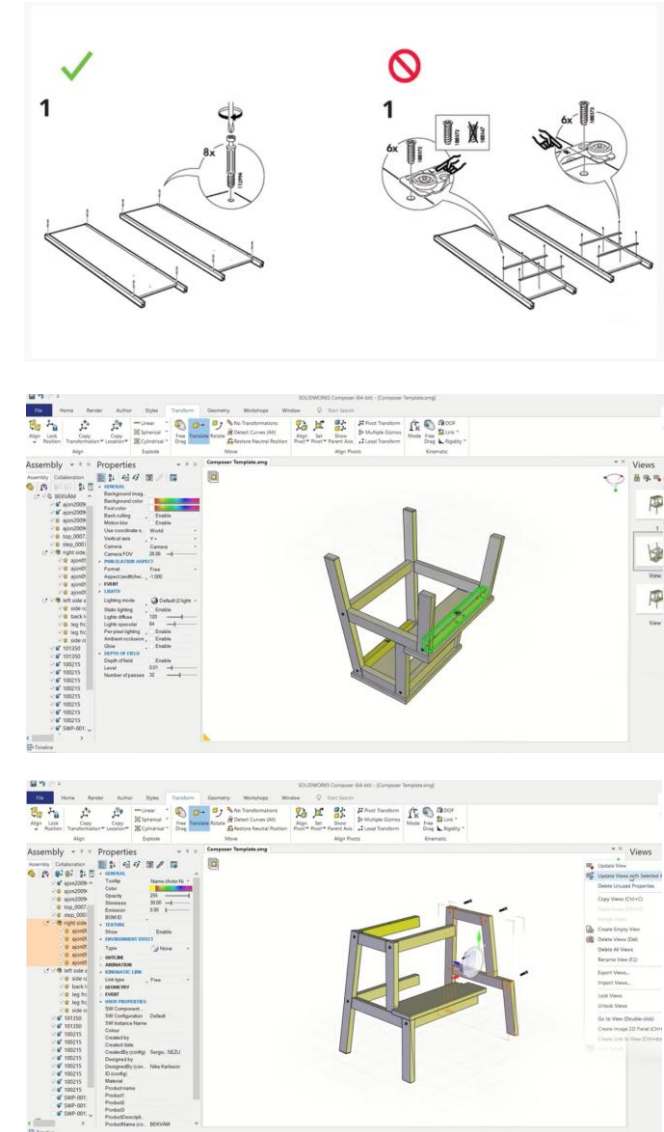
## Primer: Radijator Inženjering



## Primer: Villager Agromarket



## IKEA



**Villager**

Naslovni  
PROIZVODI

Početna - Katalogi

**KATALOZI**

Preuzmite ili pogledajte aktuelne kataloge naših proizvoda.

**Villager Garden 2019**

Preuzmi

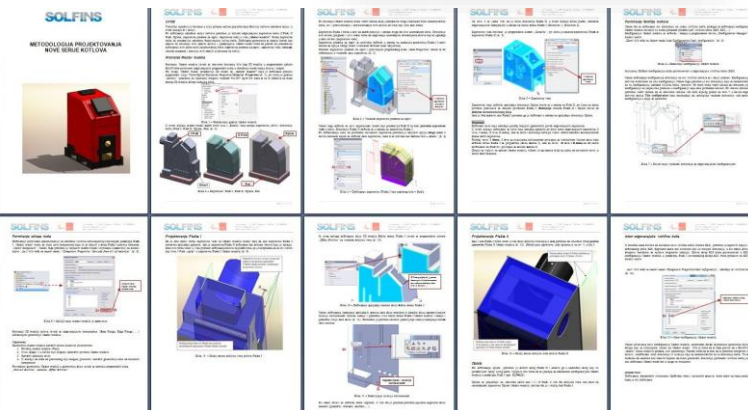
Pogledaj



**Villager Power Tools 2019**

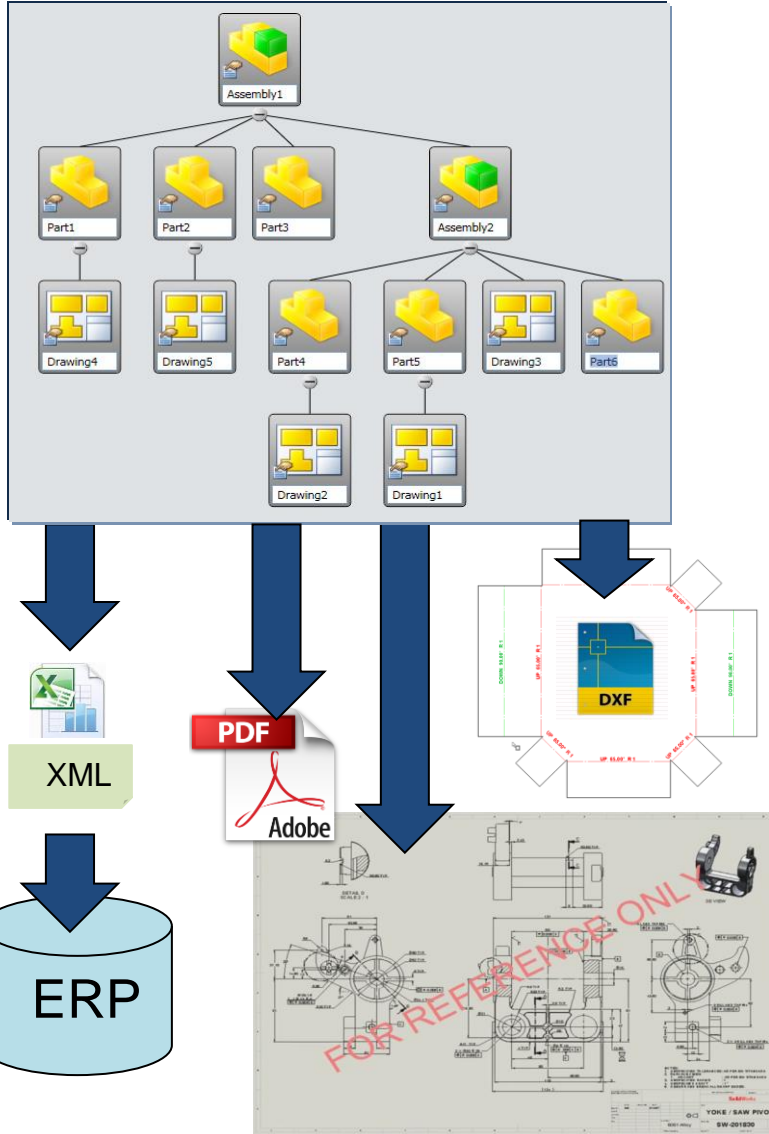
Preuzmi

Pogledaj

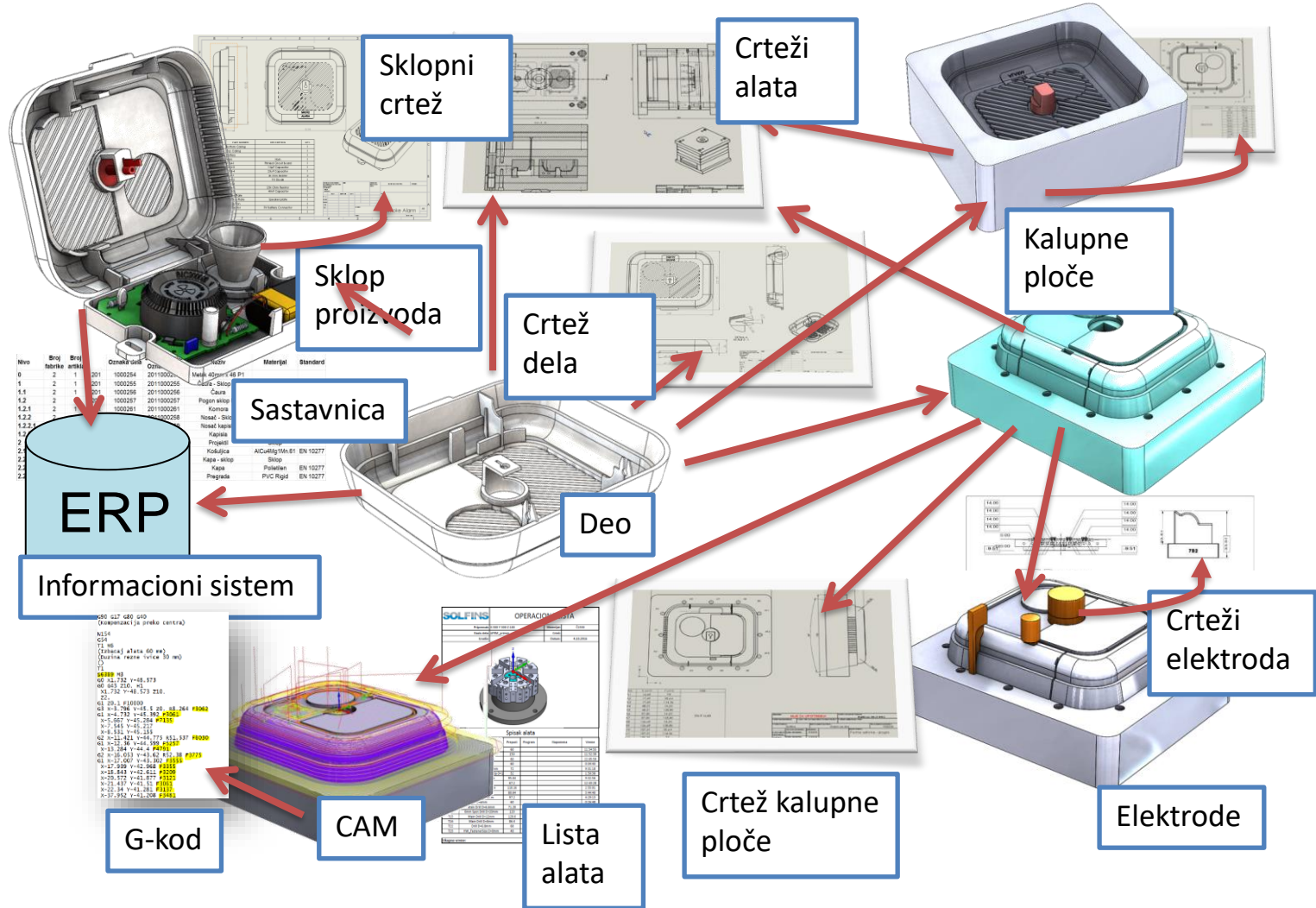




## Primer: Radijator Inženjering

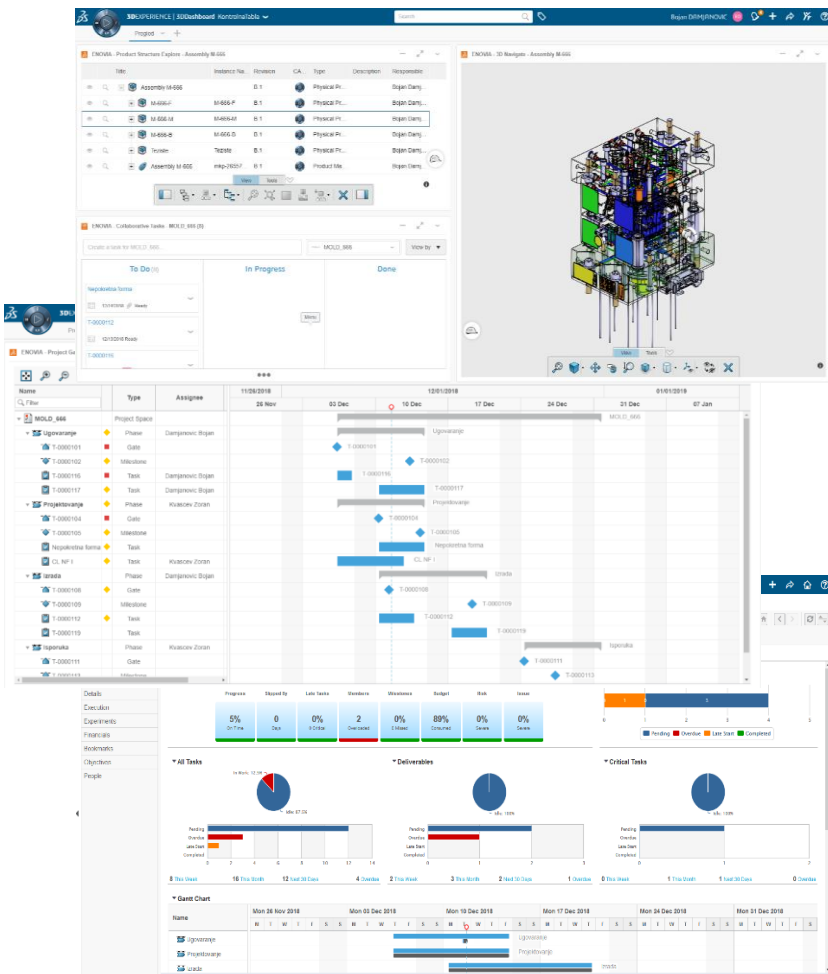


## Primer: Aling Conel

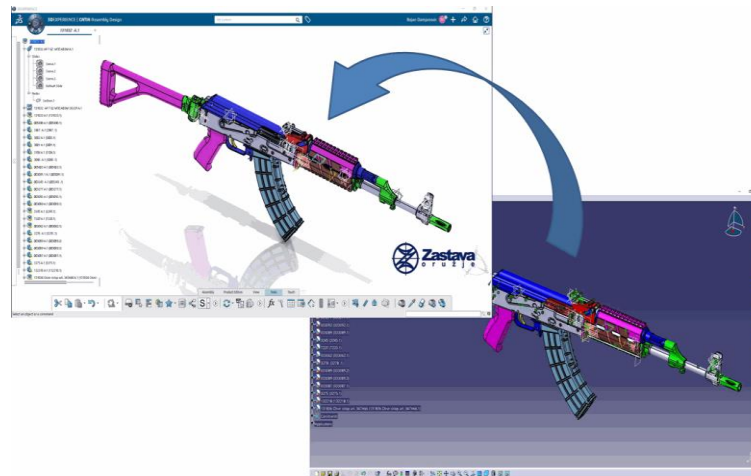


## Primer: Inmold

projektovanje alata za brizganje plastike  
projektovanje i optimizacija robota za brizganje



## Primer: Zastava oružje

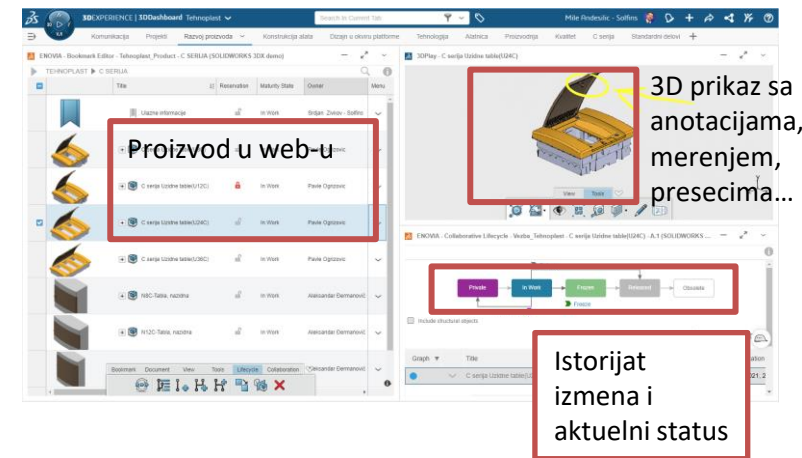


3D digitalizacija arhive i transformacija CATIA V5 dokumentacije na 3DEXPERIENCE platformu

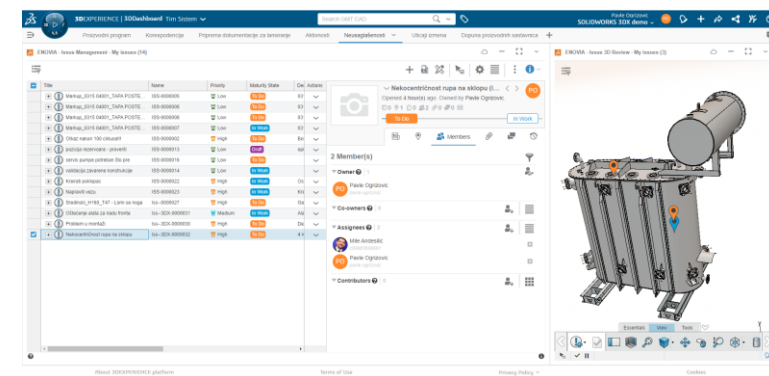
### Pokriveni procesi kroz 3DEXPERIENCE platformu:

- Razvoj proizvoda na najmoderniji način
- Varijante i konfiguracije proizvoda
- Informacije o artiklu – uvezane sa projektima i sastavnicama
- Upravljanje razvojnim projektom
- Interaktivno izveštavanje korisnika
- Interaktivno korisničko uputstvo
- Tehnologija i tehnološki postupci izrade

## Primer: Tehnoplast



## Primer: Comel



# MES i ERP rešenja za proizvodnju

# DELMIAWORKS ERP MES (VIDEO)



**01 TOSHIBA 100**

RT Work Center

General Job Information: WIP # 00043, Work Center # 01, Customer BOSTON, Center Description TOSHIBA 100, Mfg # 00000, Description VOLUME CUP

Production Summary:

STD Cycle	10.50	Next Mfg#	DOWNTIME	Off Factor	100
Last Cycle	12.12	Next Description		Availability	100
Shift Up Hours	0.00	Next Order#		Performance	87.5
Hours To Go	0.74	Cycle To Date	282	Quality	100
Shift Down Time	0.00	Cycles Left	2,121.5	Overall	87.5
Continuously Down	0.00	Shift Cycles	6	Cycle Effective %	105.00

Labels Configuration Window:

General: User-Defined, 07/00021

Customer: BOSTON SCIENTIFIC

Order #: 184841

PO #: 051921

SKU Item #: 4099992

Sales Order Qty: 01

Equipment #: 01

Ship To: BOSTON SCIENTIFIC

Label: MFG LABEL

Lot #: 100-000

Package: 100 LB BOX

PK Unit Quantity: 100

Label Quantity: 1

First Box: 15

Volume: 0.00000

Weight: 0.00000

Country Of Origin: [Blank]

Printer: [Blank]

Label Disposition Setting: [Blank]

Buttons: Disposition Labels (Current Shift), Disposition Labels (Multiple Shifts)

Scheduling - Center 01 - A-TOSHIBA 100

File Schedule View Options Capacity Requirements Labor Configure Reports Help

WOP# Customer On-Time Info

Work Center #	10/4	10/5	10/6	10/7	10/8	10/9	10/10	10/11	10/12
01	567378 EATON CORP	567465 BICC	567444 409811 ABCO INCORPORATED						567442
02	552653 ABCO INCORPORATED								
03	568227 EATON CORPORATION								
04	552408 BICC GENERAL	568029 BICC GENERAL							
05	469834 ABCO INCORPORATED	552567371 FLETCHER JONES MERCEDES BENZ	567392 BMW AG						
06	567379 ABCO INCORPORATED	567381 ABCO INCORPORATED	582624 STANT						
07	567370 STANLEY TOOL								
08									
09-A	492374 373411 1255	567889 TECHSONIC INDUSTRIES	5674567475 POLLAK						
09-B	552126 BICC GENERAL		552127 BICC GENERAL						
09-C	568036 STANT		568037 STANT	568038 STANT					
10-A	568241 MAPLE LEAF AUTO SUPPLIES		568242 MAPLE LEAF AU						

My Dashboard

Customer Service Production Finance My Workflow RTCharts Plant Layout Average Cycle Deviation

MRES PART 2 (MRES PART 2)

Plant Layout

Work Centers:

- TOSHIBA 100 - 01
- HARTIG DAVIS 01
- HARTIG DAVIS 05
- HARTIG DAVIS 06
- HARTIG DAVIS 08
- HARTIG DAVIS 09
- CINCINNATI 200 - 03
- VAN DORN 50 - 04
- TOSHIBA 200 - 05
- TOSHIBA 200 - 06

Stamping Area:

- 150 TON STAMP 01
- 350 TON STAMP 02
- 150 TON STAMP 03
- 250 TON STAMP 04
- 250 TON STAMP 05
- 60 TON STAMP 06

Other Areas:

- ASSEMBLY TABLE - ASSEMBLY-A01
- ASSEMBLY TABLE - ASSEMBLY-A02
- HAZMAT STORAGE
- SHIPPING/RECEIVING

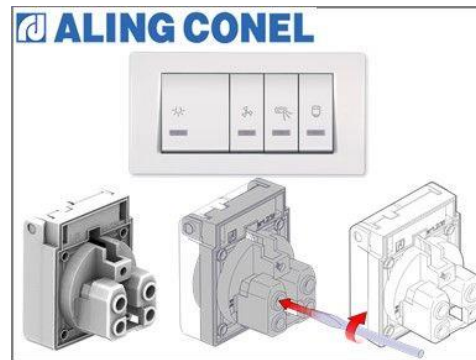
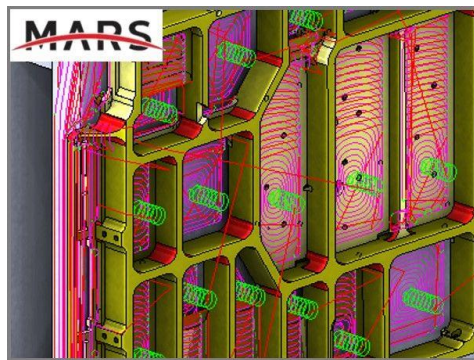
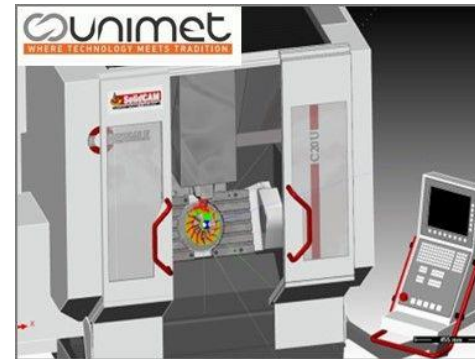
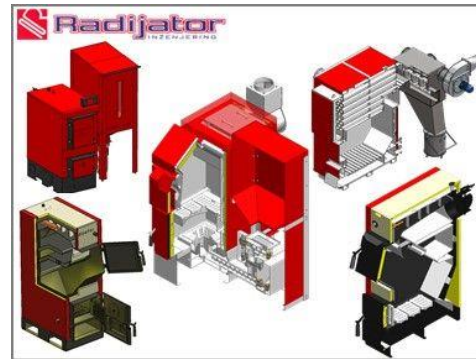
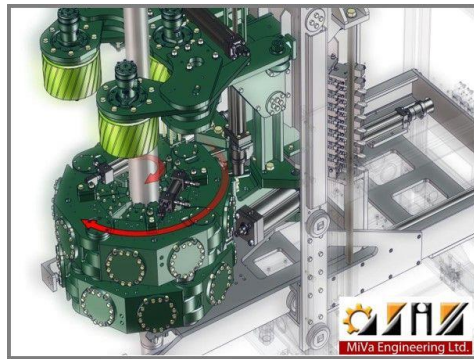
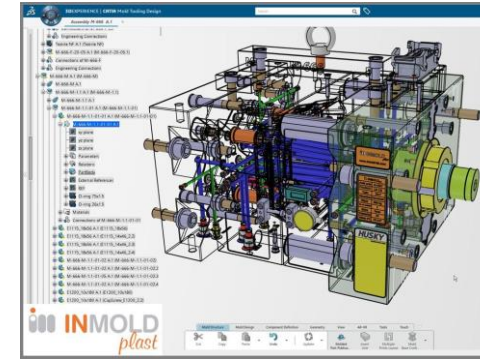
Injection Molding, Blow Molding, Assembly

Parts to Go	Hrs To Go	Items On Hand	WO Rel Date	WO Rel Qty	Run Qty	Promise Date	Request Date	Rev	Ext Descript	General	Material
47,057	564.55	Last Cycle									
4,670,394	761.59	AVG Cycle									
380,694	1,500.04	Act Cav									
9,700	18.86	Std Cav									
20,510	18.98	UpHrs									
41,891	38.79	DwnHrs									
175,192	194.66										
90,651	895.93										
192,248	401.85										
1,405,044	184.74										
-165,500	-15.08										

Data Entry

Work Center #	Item Number	Description	Parts to Go	Hrs To Go	STD Cycle	Last Cycle	AVG Cycle	Act Cav	Std Cav	UpHrs	DwnHrs	Mfg	Priority	Note	Work Order Qty	Total Scrap	Work Center Description
01	04-02099-CLR	SHRIF BRACKET 2	47,057	564.55	43.19	46.259	43.19	1	1	1.57	0.00	04-02099-CLR	48		48		0100 TON NEGATVA
02	05543-001	VOLUME CUP	4,670,394	761.59	25.83	26.141	25.83	44	48	1.57	0.00	05543-001	48		48		0100 TON NEGATVA
03	A-200-BL-BY	HANDLE, BATTERY	380,694	1,500.04	28.37	26.147	28.37	2	2	1.57	0.00	A-200-BL-BY	138		138		0100 TON VAN DORN
04	01L-010	DRILL HANDLE LEFT	9,700	18.86	06:59:56	06:59:56	9/20/2019	4	4	0.00	1.57	01L-010	4		4		0200 TON STANT
05	01S-010	DRILL HANDLE RIGHT	20,510	18.98	06:59:56	06:59:56	9/20/2019	6	6	0.00	1.57	01S-010	6		6		0200 TON STANT
06	01S-010	DRILL HANDLE LEFT	41,891	38.79	18.099	18.099	19.99	6	6	1.57	0.00	01S-010	6		6		0200 TON STANT
07	01S-010	DRILL HANDLE RIGHT	175,192	194.66	30.163	30.163	32.00	8	8	1.57	0.00	01S-010	8		8		0200 TON STANT
08	01S-010	DRILL HANDLE LEFT	90,651	895.93	40.225	40.225	35.58	1	1	1.57	0.00	01S-010	1		1		0200 TON STANT
09	01S-010	DRILL HANDLE RIGHT	192,248	401.85	30.164	30.164	30.10	4	4	1.57	0.00	01S-010	4		4		0200 TON STANT
10	01S-010	DRILL HANDLE LEFT	1,405,044	184.74	16.089	16.089	17.04	36	36	1.57	0.00	01S-010	36		36		0200 TON STANT
11	01S-010	DRILL HANDLE RIGHT	-165,500	-15.08	14.071	14.071	15.75	48	48	1.57	0.00	01S-010	48		48		0200 TON STANT





Preko 100 priča  
Solfins klijenata na  
Solfins sajtu >

