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Welding Sequence Optimizer (WSO)
Kaynak Sırası Optimizasyon Programı

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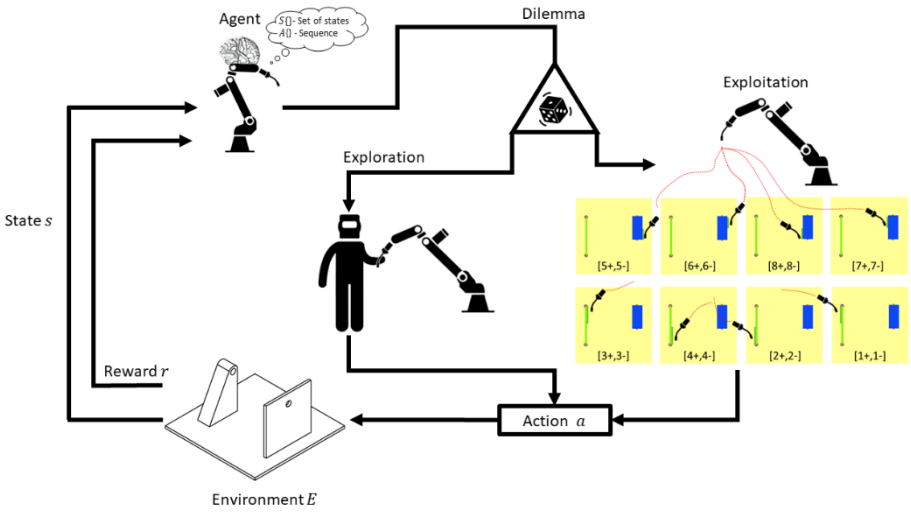
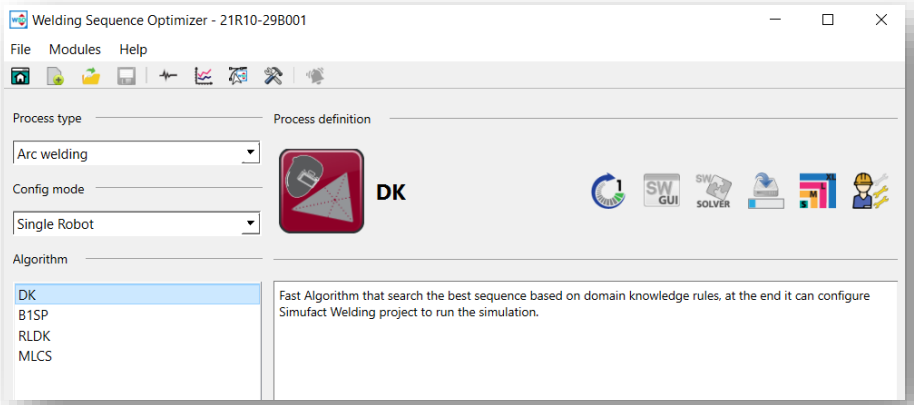
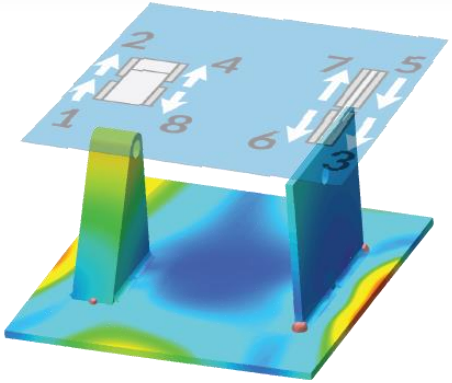
WSO

Welding Squence Optimizer (WSO)





- Kaynak sırası optimizasyon programı
  - Simufact Welding ile entegre çalışma
  - 4 farklı optimizasyon algoritması
  - Geometrik tolerans tabanlı optimizasyon



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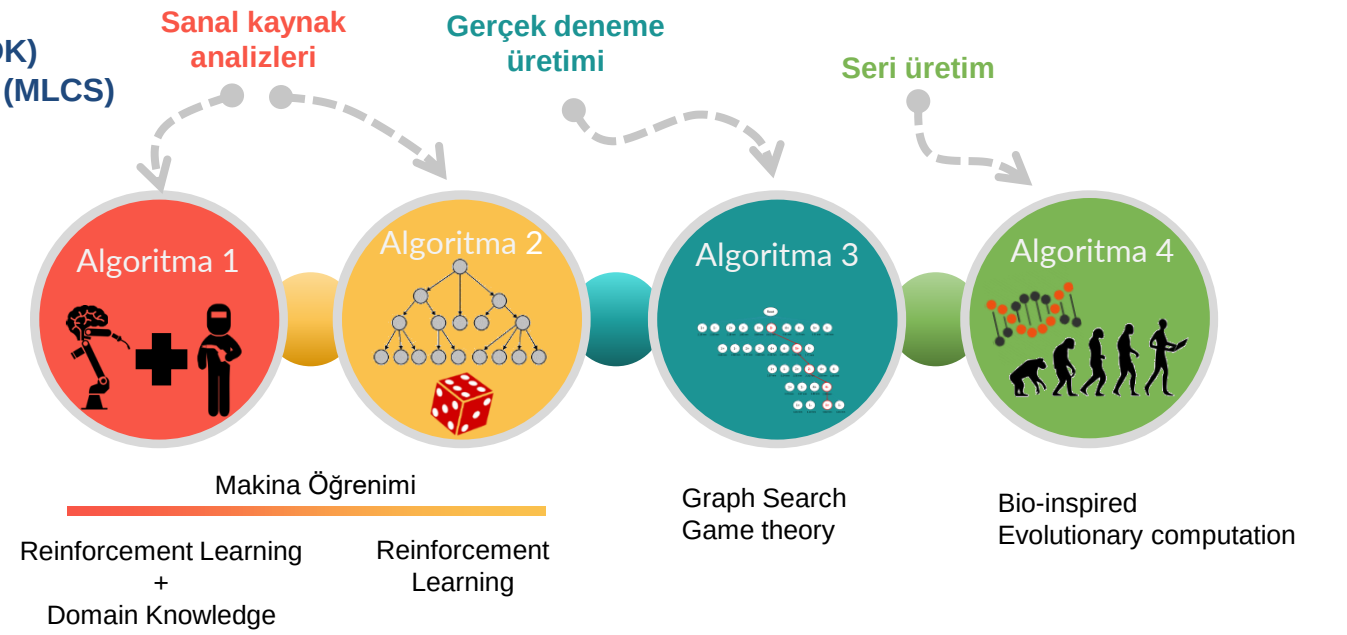
Optimizasyon Algoritmaları

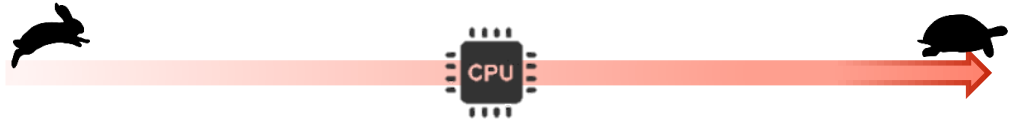
1. Domain Knowledge (DK)
2. Branch One / Shortest Path (B1SP)
3. Reinforcement Learning
   with Domain Knowledge (RLDK)
4. Modified Lowest Cost Search (MLCS)



Hızlı optimizasyon

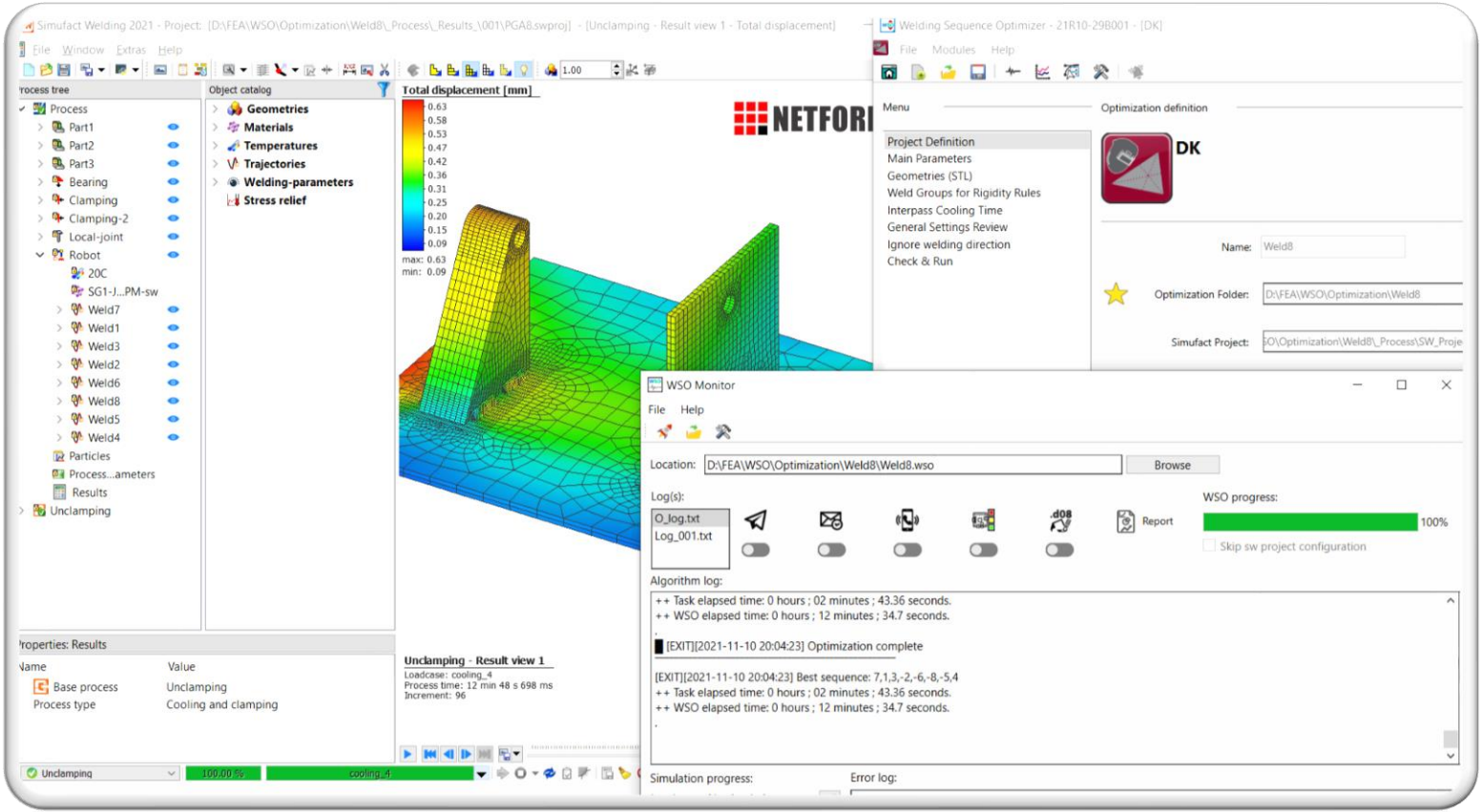
Yavaş Optimizasyon

Çarpılma eğilimine bağlı kaynak sırası belirleme

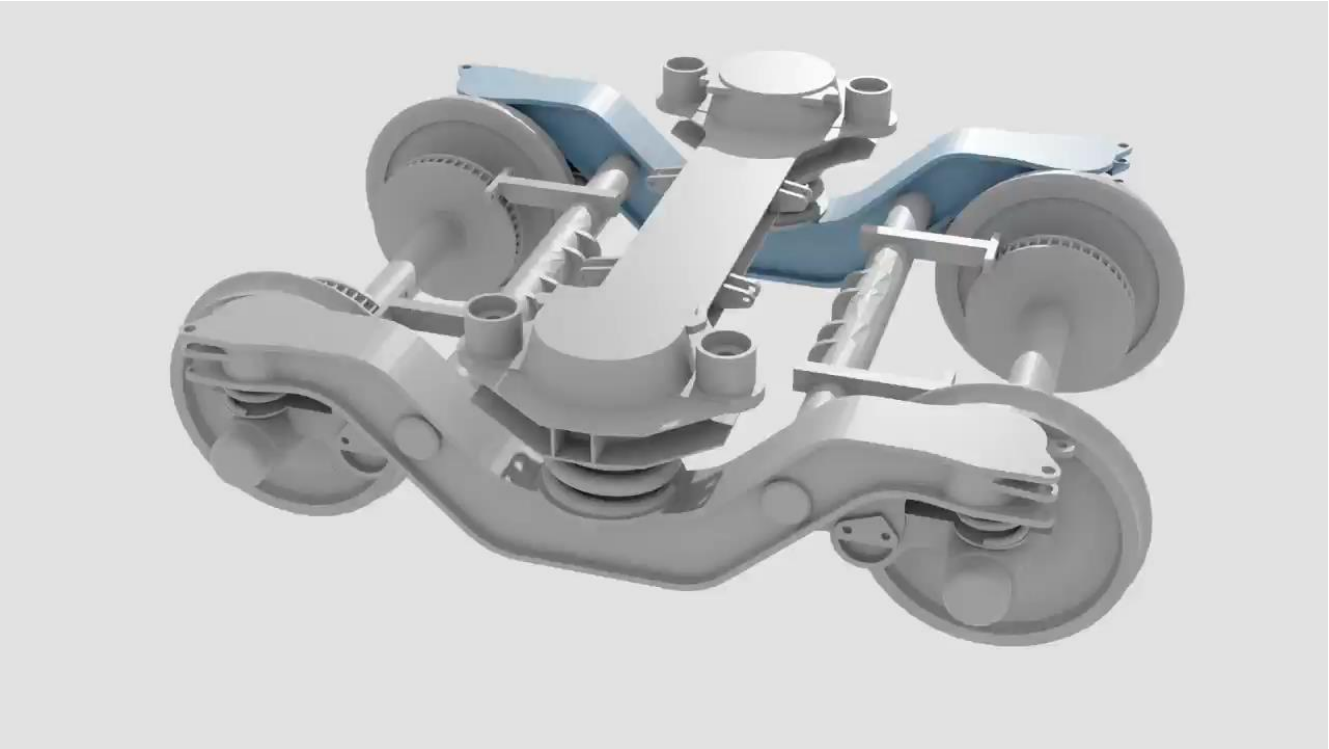


Hassas çözüm

Simufact Welding Entegrasyonu



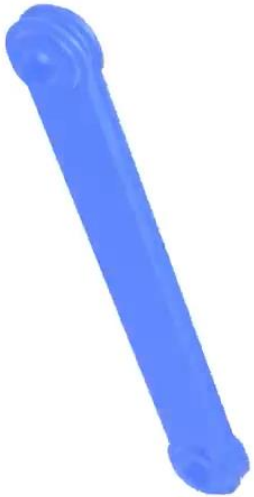
Örnek Uygulamalar - Boji

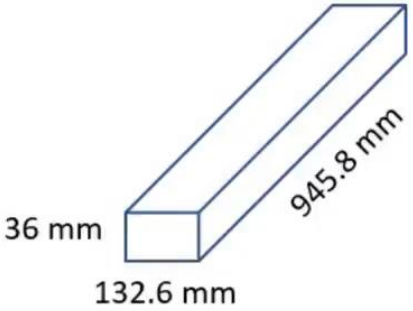


Örnek Uygulamalar – Ekskavatör Kepçesi

Örnek Uygulamalar – Ağır İş Makinası Parçası

Link





Weldment information	
Process type	Arc Welding
Material	Low Alloyed Steel
Total Welding	4.2 m

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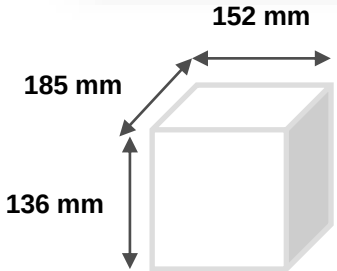
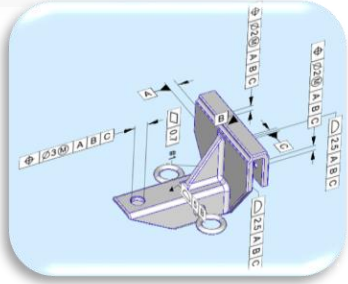
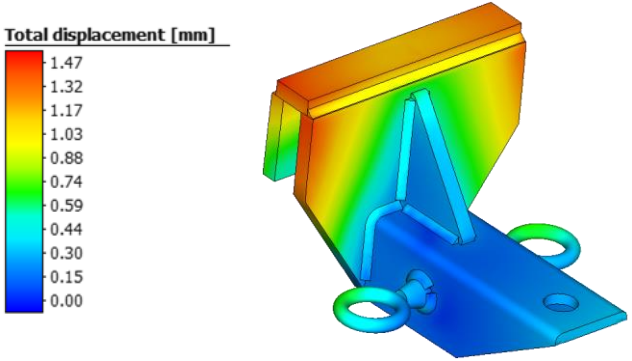
Örnek Uygulamalar – Çeki Kancası

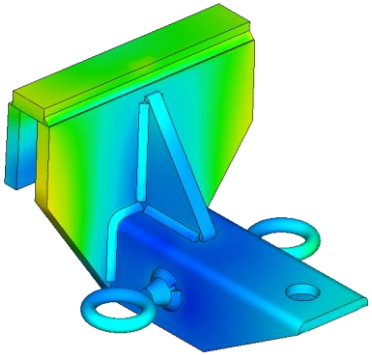


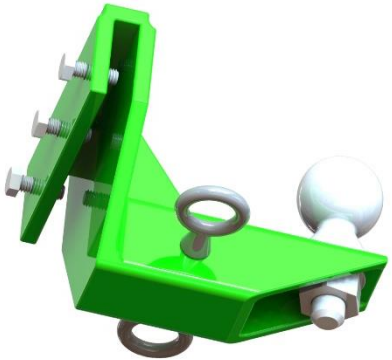


Optimizasyon öncesi uygulanan kaynak sırası



WSO ile optimize edilmiş kaynak sırası



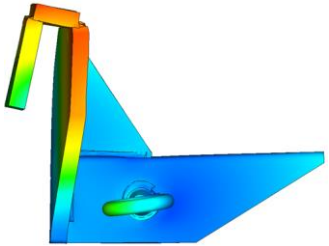


Örnek Uygulamalar – Çeki Kancası

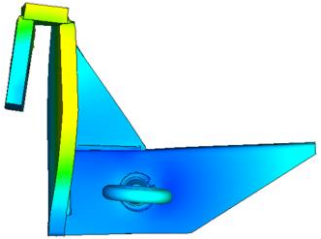
Geometrik Tolerans Analizi

İlk kaynak sırası

%32 daha düşük çarpılma



WSO



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