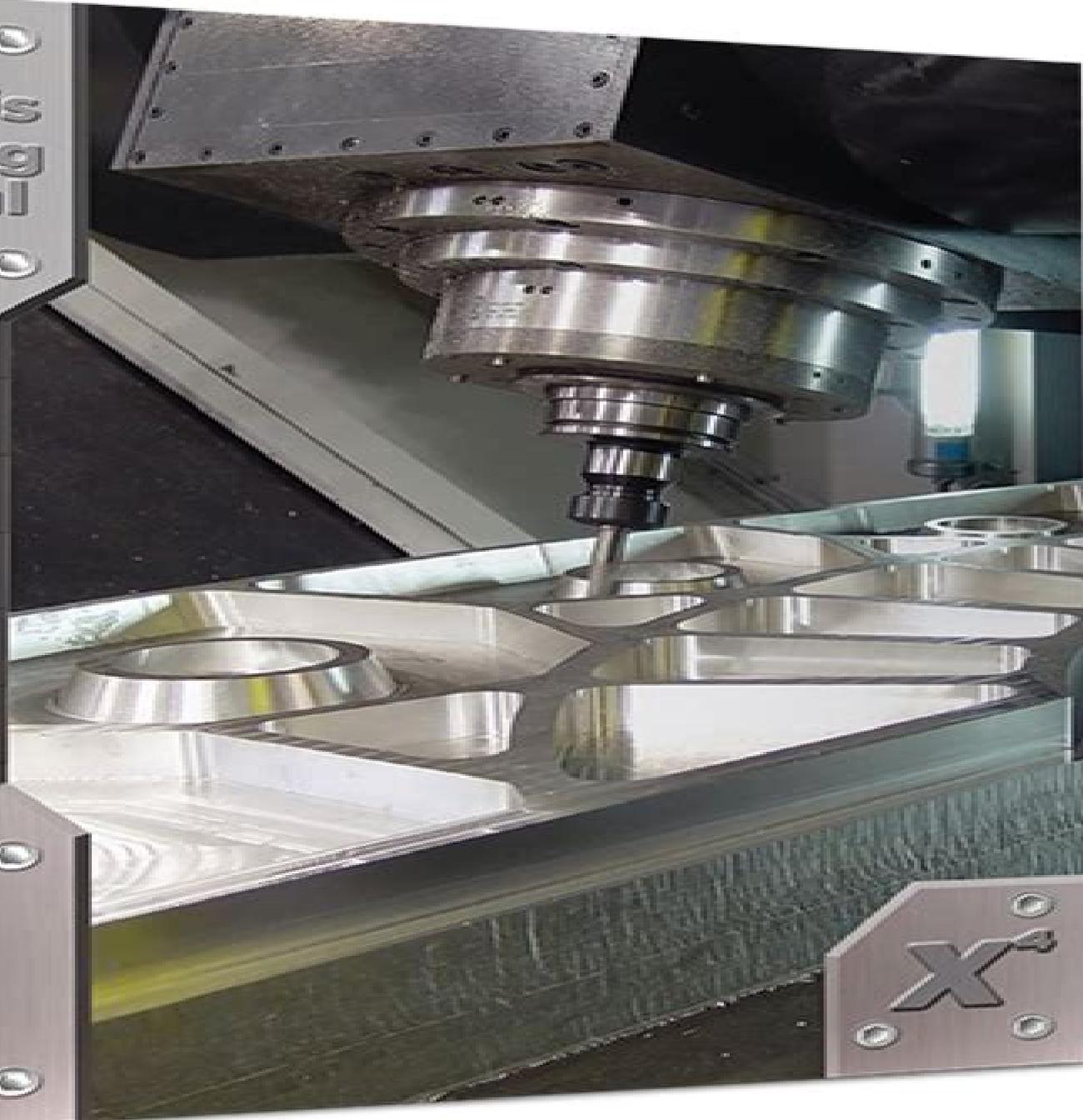


4/5 Axis  
Training  
Tutorial

Mastercam



X<sup>3</sup>

# Mastercam X4 4 Axis Tutorial

**Mike Wearne, Duane Weidinger**



## **Mastercam X4 4 Axis Tutorial:**

**MASTERCAM X : 4 & 5 AXIS MILL TRAINING TUTORIAL** Mariana Lendel,2005      **4 Axis CNC Programming with Mastercam X6** Fred Fulkerson, A comprehensive guide to programming four axis CNC milling machines using Mastercam      **Mastercam Wire Training Tutorial X** Mariana Lendel,      Product Manufacturing and Cost Estimating using CAD/CAE Kuang-Hua Chang,2013-07-01 This is the second part of a four part series that covers discussion of computer design tools throughout the design process Through this book the reader will understand basic design principles and all digital design paradigms understand CAD CAE CAM tools available for various design related tasks understand how to put an integrated system together to conduct All Digital Design ADD understand industrial practices in employing ADD and tools for product development Provides a comprehensive and thorough coverage of essential elements for product manufacturing and cost estimating using the computer aided engineering paradigm Covers CAD CAE in virtual manufacturing tool path generation rapid prototyping and cost estimating each chapter includes both analytical methods and computer aided design methods reflecting the use of modern computational tools in engineering design and practice A case study and tutorial example at the end of each chapter provides hands on practice in implementing off the shelf computer design tools Provides two projects at the end of the book showing the use of Pro ENGINEER and SolidWorks to implement concepts discussed in the book      **Mastercam X2** Mariana Lendel,20??      Mastercam X9 ,2015      **Mastercam 2022 Training Tutorial** ,2022      **Mastercam X8** Mariana Lendel,2014      **Mastercam 2025** CamInstructor,2022      **Mastercam 2026** Mike Wearne,Duane Weidinger,2026      *Mastercam 2020 Training Guide* ,2020      **Mastercam Beginner Training Tutorial X** Mariana Lendel,2005      Mastercam 2021 Matthew Manton,Duane Weidinger,Mike Wearne,      **Mastercam X4** Mariana Lendel,2009      *Mastercam Router Training Tutorial X* Mariana Lendel,2005      **MASTERCAM X7** Emre Günaydın,2014

Sizler i in haz rlanm bu eser MasterCam yaz l m n kullanarak CNC torna ve freze tezg hlar ile imalat yapabilece iniz b t n bilgileri i ermektedir Tasar m komutlar anlat m 2 boyutlu izim zellikleri ile ba lay p 3D tel kafes al malar y zey ve kat modelleme ile devam etmektedir Frezeleme zellikleri anlat m Mastercam in en h zl ekilde cevap verdi i 2D tak m yollar ile ba lay p 3D i leme ve oklu eksen i leme zellikleri ile devam etmektedir Tornalama zellikleri anlat m 2D tel kafes ve veya 3D model zerinden ba lanm ve C eksen zellikleri ile devam edilmi tir Program zellikleri en iyi ekilde anlat ld gibi uygulamalar ile b t n bu zellikler peki tirilmi tir Programdaki bir zelli in anlat lmas zerine bu zelli in imalat nas l avantajla evrilece inden de bahsedilmi tir Ayr ca CAD CAM yaz l mlar ndan elde edilen CNC kt lar n n yorumlar yap lm t r G n m zde pek ok CAD CAM kullan c s NC kodlar n bilmeden yaz l m deste i ile program yapmaktad r NC kodlar n n anlamlar n bilmek ve yorum yapabilmek size CAD CAM kullan c s olarak de er katacakt r renmek istedi iniz MasterCam yaz l m d nyadaki en eski CAD CAM yaz l d r ve b t n d nyaya kendisini ispatlam t r Bu yaz l m rendi inizde d nyan n herhangi bir yerinde imalat yapabilir ve al abilirsiniz Ayr ca kitab n yan nda hediye verilen DVD ile sesli ve g r nt l bir e itim deste i bulacaks n z Kitap hakk nda baz

konu ba l klar CAD CAM yaz l mlar ile imalata giri Mastercam aray z tan mlamalar B t n Mastercam komutlar n n zeti izim l lendirme Frezeleme Tornalama C eksen 5 eksen Mastercam tasar ma giri 2D izim komutlar zellikleri al ma d zlemi zellikleri Analiz komutlar Budama uzatma komutlar zellikleri De i tirme komutlar zellikleri 3D ta ma D nd rme 2D tak m yollar zellikleri Makine se imi K t k tan mlama Parametrik tak m yolu se imi ve zellikleri Frezelemede kesme h z devir ilerleme hesap Kesici tan mlama ve k t phaneye kaydetme Kesme parametrelerini tan mlanmas 2D tel kafes zerinden Contour tak m yollar olu turma Kesicinin i par as na giri k ayarlar Delik delme zellikleri ve G evrimleri H zl oklu delik delme zelli i Y ksek h zl y zey temizleme zelli i Cep bo altma zelli i ve giri k ayarlar Cep bo altmada y ksek h zl i leme Operasyon sayfas y netimi Tak m yollar n n sim lasyon yap lmas zellikleri NC kod retme ve makine kontrol nitesi se imleri Tornalamaya giri Tornalamada kesme h z devir ilerleme hesap Tornalamada k t k tan mlama ve k t k zerinden al ma Tornalamada ayna ve punta se imi Kaba ve final tornalama zellikleri Tornalamada kesici u ve tutucu tan mlama Kesici s f r noktas n n belirlenmesi ve kesici u rady s telafisi Sa Sol ayna ve taret tan mlama Kesicinin i par as na giri k ayarlar Tek ift y nl kesme Al n d ap i ap tornalama Dalma parametrelerini d zenlenmesi fig r i leme K t k tan mlanmas ve optimize edilmesi Tornalamada final tornalama zellikleri Tornalamada di ekme evrimleri Tornalamada fig r i leme zellikleri Tornalamada geli tirilmi kaba tornalama i lemi Tornalamada hareketli kaba tornalama i lemi Tornalamada y zey tornalama Tornalamada biten par ay kesme zelli i Tornalamada delik evrimleri zellikleri G kodlar Tornalamada noktadan noktaya tak m yolu retme H zl tornalama komutlar zellikleri evrimlerle tak m yolu olu turma zelli i G71 G75 G73 v b 3D tel kafes tasar m olu turma Y zey olu turma komutlar n n tamam Kat model olu turma zellikleri Teknik resim kartma 3D model zerinden kaba tak m yolu olu turma 3D kaba frezeleme kesme parametreleri zellikleri 3D kaba frezeleme parametreleri zellikleri Kat model y zey se imleri 3D model zerinden final tak m yolu olu turma 3D model final i leme parametreleri zellikleri Y ksek h zl i leme 3D tak m yollar zellikleri Y ksek h zl i leme kaba ve final i leme zellikleri Y ksek h zl i leme kaba ve final tak m yollar parametreleri Y ksek h zl i lemede orta kaba i lem zelli i oklu eksen i leme komutlar Parametrik oklu eksen i leme tak m yolu se imleri oklu eksen i leme tak m yollar zellikleri oklu eksen i lemede kesici u kontrol oklu eksende s rekli ve pozisyon lamal al ma oklu eksende h zl delik delme Tornalamada C eksen uygulamalar Tornalamada C eksen ile al n frezeleme Tornalamada C eksen ap frezeleme Tornalamada C eksen ap zerinde fig r i leme Tornalamada C eksen apta delik evrimleri Tornalamada C eksen al nda delik evrimleri

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install and operate the latest version of the software program using illustrations and step by step instructions

**Mastercam 2025** Mike Wearne, Duane Weidinger, 2025 This comprehensive instructional training guide provides everything you need to master Geometry Creation CAD and Toolpath Creation CAM for CNC Lathe programming using Mastercam It includes six hands on lessons covering the creation of mechanical CAD drawings and toolpaths for turning parts on a CNC lathe two focused lessons on programming C Axis toolpaths for more advanced lathe operations one lesson on creating a solid model in Creo and applying Mastercam s solid chaining features exercise drawings for every lesson to reinforce learning step by step instructions for generating G code for each project and full video tutorials showing how to complete each lesson from start to finish

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