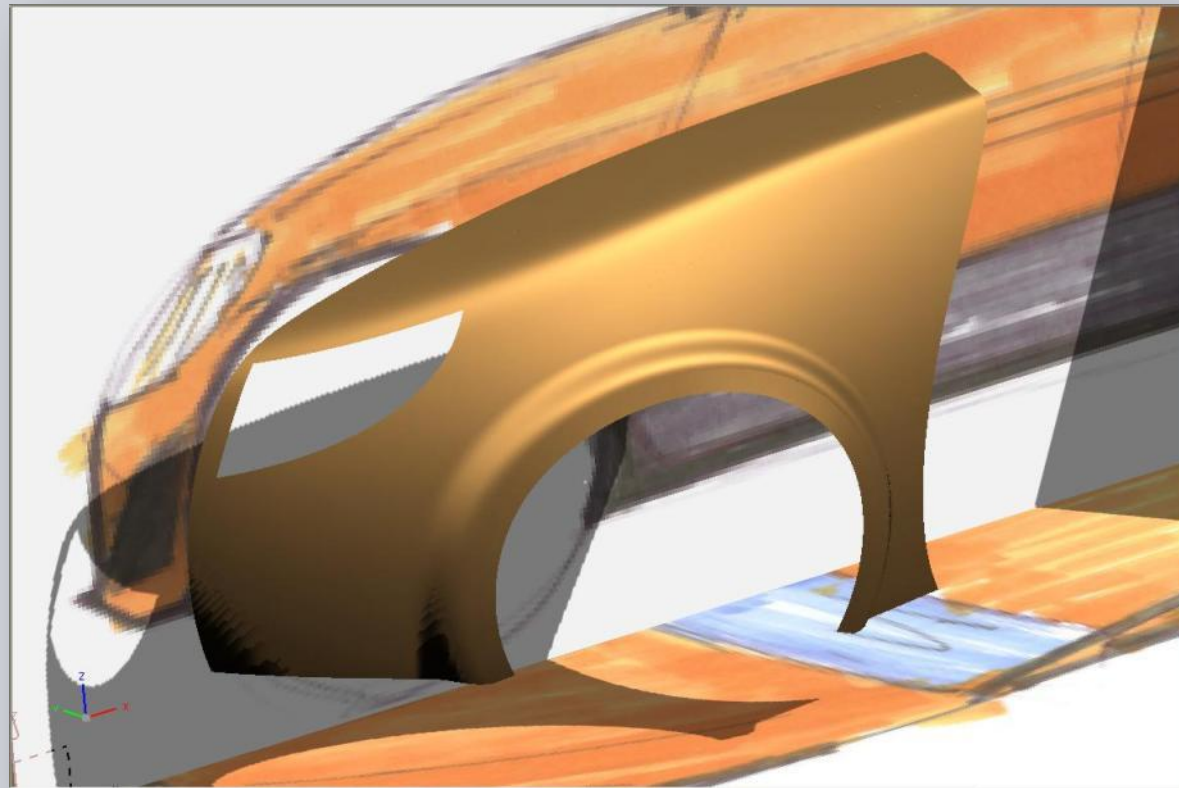
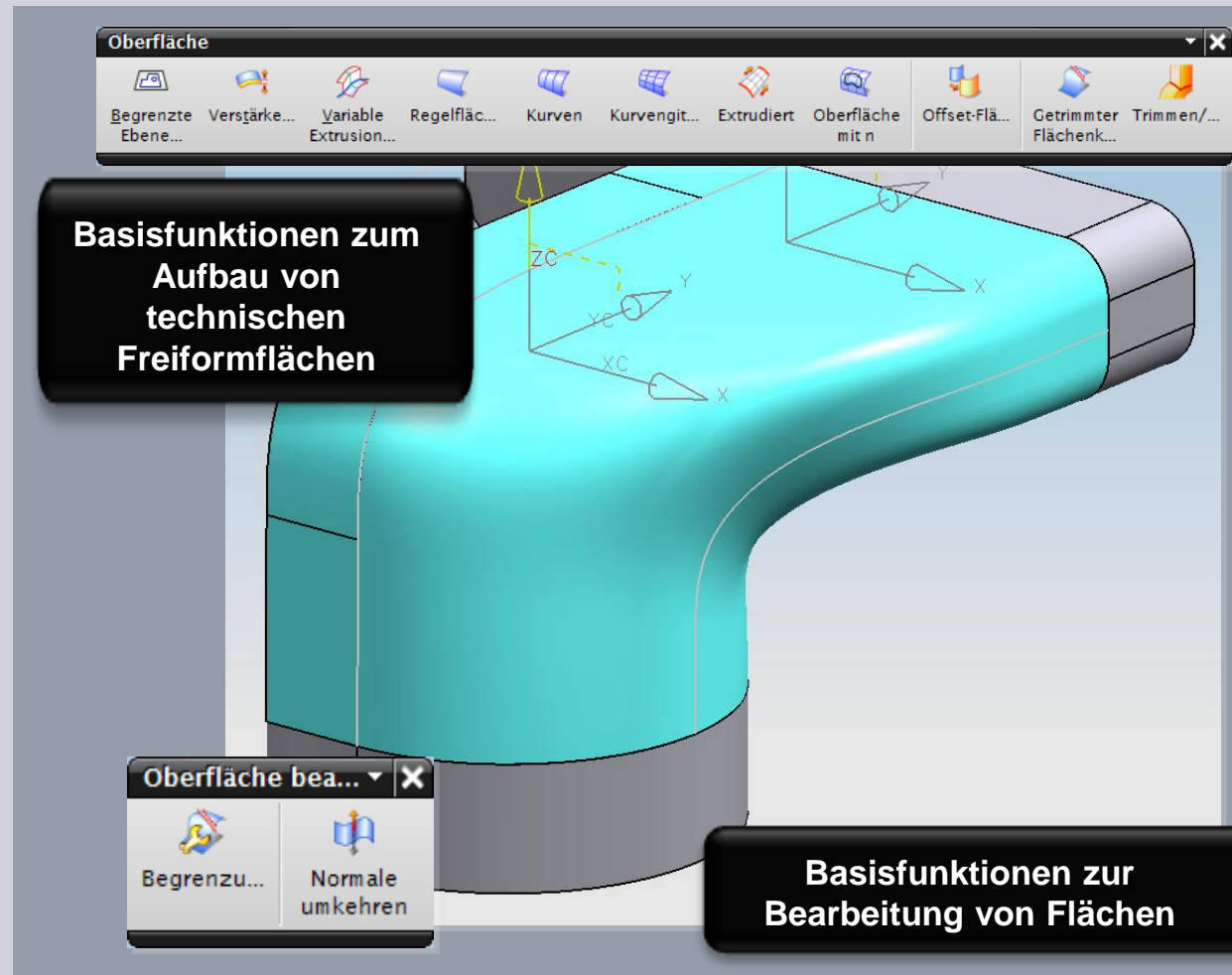


NX Übersicht Freiform-Funktionen sowie Paketierung in NX, Stand NX 7.5 (Sommer 2010)



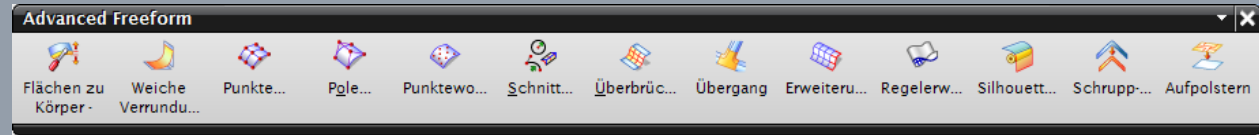
NX: Basic Freeform (FlexLM-feature-name: "nx_freeform_1")

- Bounded Plane
- Thicken Sheet
- Variational Sweep (V-Sweep)
- Ruled
- Through Curves
- Through Curve Mesh
- Swept
- N-Sided Surface
- Offset
- Trimmed Sheet
- Trim and Extend
- Reverse Normal
- Boundary

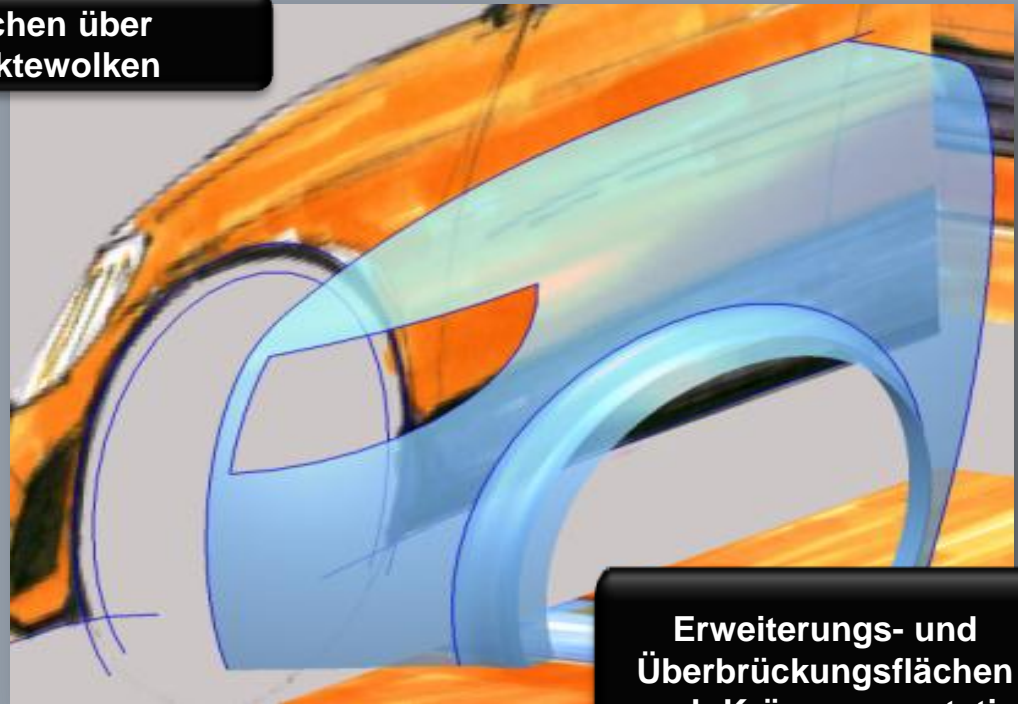


NX: Advanced Freeform (FlexLM-feature-name: "nx_freeform_2") Folie 1 von 2

Sheets to Solid Assistant
 Soft Blend
 Through Points
 From Poles
 From Point Cloud
 Section
 Bridge
 Transition
 Extension
 Law Extension
 Silhouette Flange
 Rough Offset
 Quilt



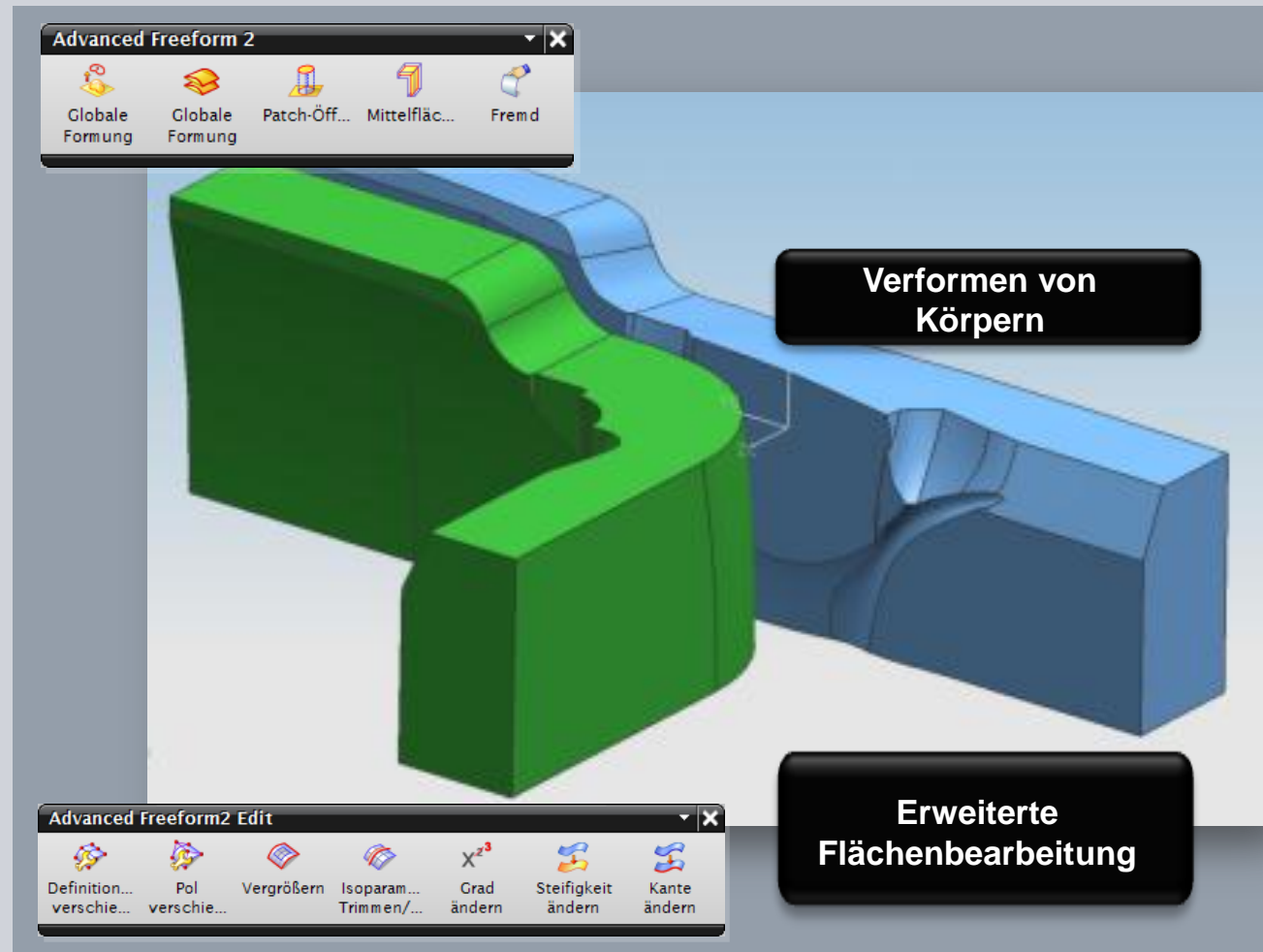
**Flächen über
Punktwolken**



**Erweiterungs- und
Überbrückungsflächen
auch Krümmungstetig**

NX: Advanced Freeform (FlexLM-feature-name: "nx_freeform_2") Folie 2 von 2

- Global Shaping
- Ribbon Builder
- Fillet
- Midsurface
- Foreign
- Move Defining Point
- Move Pole
- Enlarge
- Isoparametric Trim/Divide
- Degree
- Stiffness
- Change Edge



NX: Freeform Shape (FlexLM-feature-name: "studio_free_form")

Curve on Surface
 Swoop
 Surface by 4 Points
 Studio Surface n x n
 Styled Blend
 X-Form
 Match Edge
 Snip Surface
 Refit Face
 Shape by Template
 Deform
 Transform
 I-Form (neu NX 7.5 *)

**Sowie sämtliche
 Befehle aus dem
 Bereich Reverse
 Engineering**

Freiform-Fläche

Entwurfsfl... Vier Punkte Fläche Studio Surface Gestaltete Verrundu... Gestaltete Ecke Gestaltete Extrusion Eilgang-B...

Flächen... verformen X-Form An Kante anpassen Schnitt-O... Fläche neu anpassen Pole glätten Kurve auf Oberfläche

Umfangreiche Funktionalitäten für Class A Flächenmodellierung

Flächen / Kurven abgeleitet von Bildern oder STL-Körpern

ReverseEng

Schneide... Bohrungen füllen... Reduzier... Unterteile... Glatt verlaufen... Punkte Set zu Punkte

Mehrfach... Optimale Anpassun... Schnellflä... Formelem... extrahier... Facettenk...

Werkzeuge zur Flächenrückführung

*Anmerkung: Neben X-Form ermöglicht das in NX 7.5 neue I-Form das sog. Freeform-Modelling powered by Synchronous Technology“

NX Freeform-Funktionalität - Zusatzinformationen

Das Modul Freeform Shape kann nicht mit MACH1 kombiniert werden!

Für volle „Shape Studio“ Funktionalität (u.a. Freeform Shape, Visualize Shape, Analyze Shape) ist MACH3 Product Design oder MACH3 Industrial Design notwendig

Der Umfang von Basic Freeform ist in allen MACH-Bundles enthalten

MACH-Bundles, die Advanced Freeform (nx_freeform_2) enthalten:

- NX13100 NX Mach 3 Product Design
- NX13200 NX Mach 3 Mold Design
- NX13210 NX Mach 3 Progressive Die Design
- NX13300 NX Mach 3 Industrial Design
- NX13420 NX Mach 3 - Advanced Machining
- NX13500 NX Mach 3 Advanced Simulation
- NX14110 NX Mach 4 Ship Design
- NX14400 NX Mach 4 - Advanced Mold Manufacturing
- NX14410 NX Mach 4 - Advanced Die Manufacturing

MACH-Bundles, die Freeform Shape (studio_free_form) enthalten:

- NX13100 NX Mach 3 Product Design
- NX13300 NX Mach 3 Industrial Design



NX Freeform-Funktionalität – Überblick Paketierung in Mach-Bundles

Freeform Modeling	
Basic Freeform	Generate solids from sheets
	Basic and advanced sweeping
	V-Sweep
	Basic lofting: ruled, curve mesh
	Special surface creation: surface extension and n-sided, bounder plane, offset
	Surface manipulation tools: surface extension and surface normal
	Body-based trimming
	Surface trimming using curves
Advanced Freeform	Guided assistance in the generation of solids from sheets
	Advanced filleting capabilities – circular and/or conic (constant, linear S-shaped, variable radius)
	Advanced surface creation tools: blend, bridge, and transition
	Surface creation from external data: through points, from poles, from point clouds
	General-use design and manufacturing sweeps, and flanges: law extension, silhouette flange, ribbon builder, sectional sweep
	Approximated offsetting of complex areas.
	Surface shaping via pole and control point manipulation
	Surface redefinition via boundary, degree, and stiffness controls
	Associative, global model deformation: Alter surfaces to explore design alternatives. Modify surfaces to account for effects of springback and metal forming
	Simplify model by combining several surfaces into a single surface
	Extend and enlarge sheet bodies
	Isoparametric trim and divide
Abstract model for finite element analysis using mid-surface	
Freeform Shape	Creating and editing of curves directly on a surface
	Quick conceptual surface creation for capturing the initial design intent
	"Styled Sweep" functionality for associatively sweeping profile curves along multiple guides
	Creating and editing of studio surfaces with multiple control curves in one or two direction with G0 to G3 connection control
	Direct surface modeling capabilities via advanced pole manipulation while maintaining associativity
	Associative surface boundary control, ranging from G0 to G3
	Advanced styling workflow features: Styled Blend, Silhouette Flange, Styled Corner
	Curve and surface control point decimation and refitting tools for the creation of lightweight mesh
	Advanced surface trimming for creation of cut surface independent of original surface