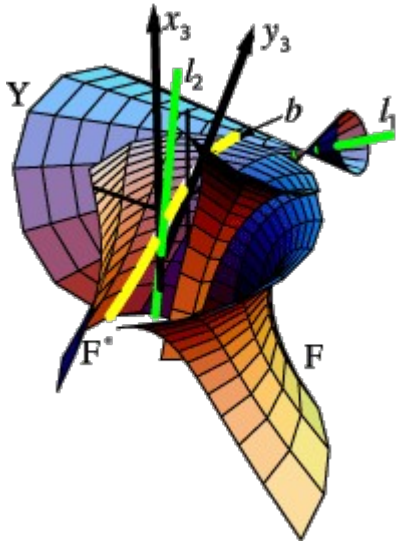
BÄR, G.:
Berührende Schraubflächen mit Schraublinienkanten. Mathematica Pannonica 8/2 (1997), pp. 225-236.

The problem is considered to determine a contacting helicoid to a given helicoid where the concerned screw axes are skew. Then, both helicoids contact along a surface stripe. Its surface axes and pitches are calculated. All axes form a PLÜCKER-conoid. Afterwards, an algorithm which determines the dressed or undercutted helicoid generated by a helicoid underlying a screw motion is presented. The generating helicoid may have a helix edge.

Such a helix edge generally causes a gap in the corresponding line of contact. With a solution of two given equations it is possible to avoid such a gap. Examples illustrate the results.



Contacting Helical Surfaces with Skew Axes