

# ISO 5686-1:2024-10 (E)

## Polygonal turret interface with flat contact surface - Part 1: Shanks of type F, H and A

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>1</b>
<b>4</b>	<b>Polygonal taper shanks, types and dimensions .....</b>	<b>2</b>
<b>4.1</b>	<b>General .....</b>	<b>2</b>
<b>4.2</b>	<b>Polygonal taper shank, Type F .....</b>	<b>3</b>
<b>4.3</b>	<b>Polygonal taper shank, Type H .....</b>	<b>6</b>
<b>4.4</b>	<b>Polygonal taper shank, Type A .....</b>	<b>7</b>
<b>4.5</b>	<b>Dimensions .....</b>	<b>7</b>
<b>5</b>	<b>Design .....</b>	<b>9</b>
<b>5.1</b>	<b>Fastening of the PTI tool holders .....</b>	<b>9</b>
<b>5.2</b>	<b>Clamping forces .....</b>	<b>9</b>
<b>5.3</b>	<b>Material and heat treatment .....</b>	<b>9</b>
<b>6</b>	<b>Designation .....</b>	<b>9</b>
<b>Annex A (informative) Clamping forces for PTI shanks of types F, H and A .....</b>		<b>10</b>
<b>Annex B (informative) Measuring planes for contour determination of the polygon .....</b>		<b>11</b>
<b>Annex C (informative) Application of PTI types in turret lathes .....</b>		<b>44</b>
<b>Annex D (informative) Set-up and design of the PTI interface in turret lathes .....</b>		<b>46</b>
<b>Annex E (informative) Interface for energy and data transfer .....</b>		<b>49</b>
<b>Bibliography .....</b>		<b>50</b>