

# ISO/TS 16610-20:2006-11 (E)

## Geometrical product specifications (GPS) - Filtration - Part 20: Linear profile filters: Basic concepts

---

Contents	Page
<b>Foreword .....</b>	<b>iv</b>
<b>Introduction .....</b>	<b>vi</b>
<b>1 Scope .....</b>	<b>1</b>
<b>2 Normative references .....</b>	<b>1</b>
<b>3 Terms and definitions .....</b>	<b>1</b>
<b>4 Basic concepts .....</b>	<b>2</b>
<b>4.1 General .....</b>	<b>2</b>
<b>4.2 Discrete representation of data .....</b>	<b>3</b>
<b>4.3 Discrete representation of the linear profile filter .....</b>	<b>3</b>
<b>4.4 Discrete representation of the weighting function .....</b>	<b>3</b>
<b>5 Linear profile filters .....</b>	<b>5</b>
<b>5.1 Filter equations .....</b>	<b>5</b>
<b>5.2 Discrete convolution .....</b>	<b>6</b>
<b>5.3 Transfer function .....</b>	<b>7</b>
<b>5.4 Filter banks .....</b>	<b>9</b>
<b>Annex A (informative) Concept diagram .....</b>	<b>10</b>
<b>Annex B (informative) Relationship to the filtration matrix model .....</b>	<b>11</b>
<b>Annex C (informative) Relationship to the GPS matrix model .....</b>	<b>12</b>
<b>Bibliography .....</b>	<b>13</b>